

GenCore version 5.1.3  
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - nucleic search, using frame\_plus\_p2n model

Run on: January 12, 2003, 10:11:31; Search time 52 Seconds

(without alignments)  
1710.313 Million cell updates/sec

Title: US-09-649-108-1

Perfect score: 1511

Sequence: 1 MRIFAVFIEMTYWHLNAFT.....KCGIQDTNSKKOSDTHLEET 230

Scoring table:

BLOSUM62	
Xgapop 10.0	Xgapext 0.5
Ygapop 10.0	Ygapext 0.5
Fgapop 6.0	Fgapext 7.0
Delop 6.0	Delext 7.0

ached: 441362 segs, 153338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:  
-MODEL-frame+ p2n-model -DEV-xlh  
-O/cgn2\_1/USPTO.spool/US09649108/rnat\_12012003\_101121\_13898/app\_query.fasta\_1.455  
-DB-Issued\_Patents\_NA -OPMT-fastap -SUFFIX-tri -MINMATCH=0.1 -LOOPCL=0  
-LIST=45 -DOCALLIGN=200 -THR\_SCORE-pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15  
-MODE-LOCAL -OUTPMT-p2n -NORM-ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000  
-USER-US09649108.GCNC.1.1.25 @rnat\_12012003\_101121\_13898 -NCPU=6 -ICPR=3  
-NO\_XLPHY -NO\_MMAP -LARGEQUERY -NEG\_SCORES=0 -WAIT -LONGLOG -DEV\_TIMEOUT=120  
-NARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-XGAPOP=10 -XGAPEXT=0.5 -DELOP=6 -DELEX=7

Database :

1: Issued\_Patents\_NA:\*  
2: /cgn2\_6/p2n/na/5A\_COMB.seq:\*  
3: /cgn2\_6/p2n/na/5B\_COMB.seq:\*  
4: /cgn2\_6/p2n/na/6A\_COMB.seq:\*  
5: /cgn2\_6/p2n/na/6B\_COMB.seq:\*  
6: /cgn2\_6/p2n/na/6C\_COMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	311	20.6	1602	4	US-09-651-200-11
2	311	20.6	2229	4	US-09-651-200-5
3	307	20.3	1020	4	US-09-651-200-7
4	307	20.3	1333	4	US-09-651-200-9
5	307	20.3	2691	4	US-09-651-200-1
6	307	20.3	2885	4	US-09-651-200-3
7	191	12.6	2637	4	US-09-651-200-1
8	176.5	11.7	1491	2	US-08-147-772-1
9	176.5	11.7	1491	2	US-08-456-104-5
10	176.5	11.7	1491	2	US-08-101-624-22
11	176.5	11.7	1491	2	US-08-751-767A-5
12	176.5	11.7	1491	3	US-08-153-262-1

13	176.5	11.7	1491	3	US-08-479-744A-28	Sequence 28, App1
14	176.5	11.7	1491	3	US-08-280-757B-28	Sequence 28, App1
15	176.5	11.7	1491	3	US-09-159-135-1	Sequence 1, App1
16	176.5	11.7	1491	4	US-08-205-697A-18	Sequence 18, App1
17	176.5	11.7	1491	4	US-08-702-525-18	Sequence 18, App1
18	176.5	11.7	1491	4	US-09-450-798-1	Sequence 1, App1
19	176.5	11.7	1491	4	US-09-326-186B-225	Sequence 225, App
20	176.5	11.7	1491	4	US-08-403-253A-1	Sequence 1, App1
21	176.5	11.7	1491	5	PCT-US95-02576-18	Sequence 18, App1
22	172	11.4	867	2	US-08-184-009-207	Sequence 207, App
23	172	11.4	867	2	US-08-458-356-207	Sequence 207, App
24	172	11.4	867	4	US-08-812-946A-2	Sequence 2, App1
25	172	11.4	867	4	US-08-460-736-207	Sequence 207, App
26	172	11.4	879	4	US-09-039-682A-31	Sequence 31, App1
27	172	11.4	879	4	US-09-039-681-31	Sequence 31, App1
28	172	11.4	879	4	US-09-039-762A-31	Sequence 31, App1
29	172	11.4	879	4	US-09-042-492D-31	Sequence 31, App1
30	172	11.4	879	4	US-08-913-612A-31	Sequence 31, App1
31	169.5	11.2	921	2	US-08-184-009-202	Sequence 202, App
32	169.5	11.2	921	2	US-08-458-356-202	Sequence 202, App
33	169.5	11.2	921	4	US-08-460-736-202	Sequence 202, App
34	169.5	11.2	1716	2	US-08-147-772-3	Sequence 3, App1
35	169.5	11.2	1716	2	US-08-456-104-7	Sequence 7, App1
36	169.5	11.2	1716	2	US-08-101-624-24	Sequence 24, App1
37	169.5	11.2	1716	3	US-08-153-262-3	Sequence 3, App1
38	169.5	11.2	1716	3	US-08-479-744A-30	Sequence 30, App1
39	169.5	11.2	1716	3	US-08-280-757B-30	Sequence 30, App1
40	169.5	11.2	1716	3	US-09-159-135-3	Sequence 3, App1
41	169.5	11.2	1716	4	US-08-205-697A-16	Sequence 16, App1
42	169.5	11.2	1716	4	US-08-702-525-16	Sequence 16, App1
43	169.5	11.2	1716	4	US-09-450-798-3	Sequence 3, App1
44	169.5	11.2	1716	5	PCT-US95-02576-16	Sequence 16, App1
45	169.5	11.2	1888	4	US-08-205-697A-1	Sequence 1, App1

#### ALIGNMENTS

RESULT 1  
US-09-651-200-11  
Sequence 11, Application US/09651200  
Patent No. 6429303  
GENERAL INFORMATION:  
APPLICANT: Green et al  
TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B  
TITLE OF INVENTION: Polypeptides Activation Antigen B-7 Family and  
FILE REFERENCE: 15966-562 (CURA-62)  
CURRENT APPLICATION NUMBER: US/09/651,200  
CURRENT FILING DATE: 2000-08-30  
PRIOR APPLICATION NUMBER: 60/152383  
PRIOR FILING DATE: 1999-09-03  
PRIOR APPLICATION NUMBER: 60/172909  
PRIOR FILING DATE: 1999-12-21  
PRIOR APPLICATION NUMBER: 60/183578  
PRIOR FILING DATE: 2000-02-18  
NUMBER OF SEQ ID NOS: 25  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 11  
LENGTH: 1602  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-651-200-11  
Alignment Scores:  
Pred. No.: 4,76e-30  
Score: 311.00  
Percent Similarity: 48.03%  
Best Local Similarity: 30.11%  
Query Match: 20.58%  
DB: 4  
Gaps: 5  
US-09-649-108-1 (1-290) x US-09-651-200-11 (1-1602)



GenCore version 5.1.3  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: January 12, 2003, 10:10:41 : Search time 14.4076 Seconds  
(without alignments)  
533.008 Million cell updates/sec

Title: US-09-649-108-1\_COPY\_30\_290  
Perfect score: 1356  
Sequence: 1 VEYGSNMTIECKFPVEKOLD.....KCGIDPTNSKQSDTHLEET 261

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

1 number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Listing First 45 summaries

Database : Issued Patents.AA:\*  
1: /cgn2\_6/ptodata/2/1aa/5B\_COMB.pep:\*  
2: /cgn2\_6/ptodata/2/1aa/5B\_COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A\_COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B\_COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/6C\_COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/6D\_COMB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	292	21.5	534	4	US-09-651-200-6
2	292	21.5	534	4	US-09-651-200-24
3	288	21.2	340	4	US-09-651-200-2
4	288	21.2	441	4	US-09-651-200-4
5	187.5	13.8	282	4	US-09-404-879A-393
6	187.5	13.8	309	4	US-09-404-879A-392
7	181	13.3	329	4	US-09-651-200-19
8	177.5	13.1	306	2	US-08-147-772-4
9	177.5	13.1	306	2	US-08-456-104-8
10	177.5	13.1	306	2	US-08-101-624-25
11	177.5	13.1	306	3	US-08-153-262-4
12	177.5	13.1	306	3	US-08-479-744A-31
13	177.5	13.1	306	4	US-08-280-757B-31
14	177.5	13.1	306	4	US-09-159-135-4
15	177.5	13.1	306	4	US-09-450-798-4
16	170	12.5	288	4	US-09-651-200-14
17	169.5	12.5	306	4	US-08-205-697A-17
18	169.5	12.5	306	4	US-08-702-525-17
19	169.5	12.5	306	4	US-09-651-200-17
20	169.5	12.5	306	5	PCT-US95-02576-17
21	169.5	12.5	320	4	US-08-205-697A-2
22	169.5	12.5	320	4	US-08-702-525-2
23	169.5	12.5	320	5	PCT-US95-02576-2
24	167	12.3	288	2	US-08-147-772-2
25	167	12.3	288	2	US-08-456-104-6
26	167	12.3	288	2	US-08-101-624-23
27	167	12.3	288	2	US-08-751-767A-6

28	167	12.3	288	3	US-08-153-262-2	Sequence 2, App1
29	167	12.3	288	4	US-08-479-744A-29	Sequence 29, App1
30	167	12.3	288	4	US-08-280-757B-29	Sequence 29, App1
31	167	12.3	288	4	US-09-159-135-2	Sequence 2, App1
32	167	12.3	288	4	US-08-205-697A-19	Sequence 19, App1
33	167	12.3	288	4	US-08-702-525-19	Sequence 19, App1
34	167	12.3	288	4	US-09-450-798-2	Sequence 2, App1
35	167	12.3	288	4	US-08-403-253A-2	Sequence 2, App1
36	167	12.3	288	4	US-09-651-200-13	Sequence 13, App1
37	167	12.3	288	5	PCT-US95-02576-19	Sequence 19, App1
38	161	11.9	323	5	US-09-651-200-21	Sequence 21, App1
39	161	11.9	323	5	PCT-US94-09642-2	Sequence 2, App1
40	161	11.9	329	2	US-08-456-104-2	Sequence 2, App1
41	161	11.9	329	2	US-08-101-624-2	Sequence 2, App1
42	161	11.9	329	3	US-08-479-744A-2	Sequence 2, App1
43	161	11.9	329	4	US-08-280-757B-2	Sequence 2, App1
44	161	11.9	329	4	US-08-205-697A-23	Sequence 23, App1
45	161	11.9	329	4	US-08-702-525-23	Sequence 23, App1

## ALIGNMENTS

RESULT 1  
US-09-651-200-6  
Sequence 6, Application US/09651200  
Patent No. 6429303

GENERAL INFORMATION:

APPLICANT: Green et al

TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B

TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and

FILE REFERENCE: 15966-562 (CURA-62)

CURRENT APPLICATION NUMBER: US/09/651,200

CURRENT FILING DATE: 2000-08-30

PRIOR APPLICATION NUMBER: 60/152383

PRIOR FILING DATE: 1999-09-03

PRIOR APPLICATION NUMBER: 60/172909

PRIOR FILING DATE: 1999-12-21

PRIOR APPLICATION NUMBER: 60/183578

PRIOR FILING DATE: 2000-02-18

NUMBER OF SEQ ID NOS: 25

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 6

LENGTH: 534

TYPE: PRT

ORGANISM: Homo sapiens

US-09-651-200-6

Query Match 21.5%; Score 292; DB 4; Length 534;  
Best local similarity 29.5%; Pred. No. 1.7e-22;  
Matches 78; Conservative 49; Mismatches 123; Indels 14; Gaps 5;

QY	4	GSMNTIECKFPVEKOLDLALTYWEMEDKNIQFVGEEDLKVQSHSYQORARLLKQOL	63
DB	261	GTDATLCSFSPGSGSLAOLNLTWLTDRK--OLVHSFTEGRGQGSAYANRRALRPDL	318
QY	64	SLGNAALQITVDLQDAGVRCMISYGADYKRTIVVNAIPYK-----INRILVDP	117
DB	319	AGQNASRLRQAVADGSGTFCVSTIDPGSAVSLQVAPYKSPMTLEPNDRGDT	378
QY	118	VTESEHEITQCA-BGYKAEVIMTSSDHQVLSGKTTTNSKREKLEFVNTSLRINTTNE	176
DB	379	VT-----ITCSYRGYDEAEVFMODGQGVPLTGNTTSOMANEOGLFVHSLRVLCAG	434
QY	177	IFCTPRRDPENHRAELVYIPPLAHPNERTHLVITCALILCLQVATLFFRLKGR	236
DB	435	TYSCLVNRYLQDAGHSVITGQPMTEPPALMTVTVGLSVCLIALVLAFCWRRKIQ	494
QY	237	MDVKKCGIDPTNSKRO-SDTHLE	259
DB	495	SCEENAGAPDODGEGSGTKALQ	518

```
RESULT 2
US-09-651-200-24
; Sequence 24, Application US/09651200
; Patent No. 6429303
; GENERAL INFORMATION:
; APPLICANT: Green et al
; TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B
; TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and
; FILE REFERENCE: 15966-562 (CURA-62)
; CURRENT APPLICATION NUMBER: US/09/651,200
; CURRENT FILING DATE: 2000-08-30
; PRIOR APPLICATION NUMBER: 60/152383
; PRIOR FILING DATE: 1999-09-03
; PRIOR APPLICATION NUMBER: 60/172909
; PRIOR FILING DATE: 1999-12-21
; PRIOR APPLICATION NUMBER: 60/183578
; PRIOR FILING DATE: 2000-02-18
; MEMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 24
; LENGTH: 534
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: Sequence
; OTHER INFORMATION: m25020.protein from Figure 4.
US-09-651-200-24
```

```
Query Match 21.5%; Score 292; DB 4; Length 534;
Best Local Similarity 29.5%; Pred. No. 1.7e-22;
Matches 78; Conservative 49; Mismatches 123; Indels 14; Gaps 5;
```

```
OY 4 GSNMTIECKFPPEKOLDLAALIVYEMEDKNIQVHGEEDLKQVHSSYRQARLLKQDL 63
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 261 GTDALTLCFSFSPGFSSTQNLIMQLTDTK--QLVHSFTEDRDGSAVANFTALFPD 318
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 64 SIGNALQITDVKLODAGVRCMISYGADYKRITVKNVAPYK-----INQRLIVDP 117
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 319 AOGNASLRLQRYRVADSGFTCFVSIIRPGSAVAASLQVAAPYKSKSMTEPKDLRPGDT 378
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 118 VTSEHELTCQA-EGYPKAEVITSSDHOVLSGKTTTNSKREKLEFNTSTLRINTTNE 176
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 379 VT----ITCSSYRGYPKAEVEFWQDQGVPLTGNTTSSQANQGLFDVHSVLRVVLGANG 434
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 177 IFYCFRLDPEENHTALVLPDLPLAHPNERTHLVILGAILLGLVALTIFRLKGR 236
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 435 TYSCLVRNPVLQODAHGSVTTIGQPMTEPPEALMTVTVGLSLIALVALAFVCMRKIKQ 494
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 237 MMDVKKCGIQDPTNSKKQ--SDTHLE 259
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 495 SCEENAGAEEDDGESEKSTALQ 518
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 3
US-09-651-200-2
; Sequence 2, Application US/09651200
; Patent No. 6429303
; GENERAL INFORMATION:
; APPLICANT: Green et al
; TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B
; TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and
; FILE REFERENCE: 15966-562 (CURA-62)
; CURRENT APPLICATION NUMBER: US/09/651,200
; CURRENT FILING DATE: 2000-08-30
; PRIOR APPLICATION NUMBER: 60/152383
; PRIOR FILING DATE: 1999-09-03
; PRIOR APPLICATION NUMBER: 60/172909
; PRIOR FILING DATE: 1999-12-21
; PRIOR APPLICATION NUMBER: 60/183578
; PRIOR FILING DATE: 2000-02-18
```

```
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 340
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-651-200-2
```

```
Query Match 21.2%; Score 288; DB 4; Length 340;
Best Local Similarity 29.2%; Pred. No. 2.3e-22;
Matches 77; Conservative 49; Mismatches 124; Indels 14; Gaps 5;
```

```
OY 4 GSNMTIECKFPPEKOLDLAALIVYEMEDKNIQVHGEEDLKQVHSSYRQARLLKQDL 63
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 67 GTDALTLCFSFSPGFSSTQNLIMQLTDTK--QLVHSFTEDRDGSAVANFTALFPD 124
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 64 SIGNALQITDVKLODAGVRCMISYGADYKRITVKNVAPYK-----INQRLIVDP 117
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 125 AOGNASLRLQRYRVADSGFTCFVSIIRPGSAVAASLQVAAPYKSKSMTEPKDLRPGDT 184
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 118 VTSEHELTCQA-EGYPKAEVITSSDHOVLSGKTTTNSKREKLEFNTSTLRINTTNE 176
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 185 VT----ITCSSYRGYPKAEVEFWQDQGVPLTGNTTSSQANQGLFDVHSVLRVVLGANG 240
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 177 IFYCFRLDPEENHTALVLPDLPLAHPNERTHLVILGAILLGLVALTIFRLKGR 236
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 241 TYSCLVRNPVLQODAHGSVTTIGQPMTEPPEALMTVTVGLSLIALVALAFVCMRKIKQ 300
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 237 MMDVKKCGIQDPTNSKKQ--SDTHLE 259
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 301 SCEENAGAEEDDGESEKSTALQ 324
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
```

## RESULT 4

```
US-09-651-200-4
; Sequence 4, Application US/09651200
; Patent No. 6429303
; GENERAL INFORMATION:
; APPLICANT: Green et al
; TITLE OF INVENTION: Polynucleotides Encoding Members of the Human B
; TITLE OF INVENTION: Lymphocyte Activation Antigen B-7 Family and
; FILE REFERENCE: 15966-562 (CURA-62)
; CURRENT APPLICATION NUMBER: US/09/651,200
; CURRENT FILING DATE: 2000-08-30
; PRIOR APPLICATION NUMBER: 60/152383
; PRIOR FILING DATE: 1999-09-03
; PRIOR APPLICATION NUMBER: 60/172909
; PRIOR FILING DATE: 1999-12-21
; PRIOR APPLICATION NUMBER: 60/183578
; PRIOR FILING DATE: 2000-02-18
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 441
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-651-200-4
```

```
Query Match 21.2%; Score 288; DB 4; Length 441;
Best Local Similarity 29.2%; Pred. No. 3.3e-22;
Matches 77; Conservative 49; Mismatches 124; Indels 14; Gaps 5;
```

```
OY 4 GSNMTIECKFPPEKOLDLAALIVYEMEDKNIQVHGEEDLKQVHSSYRQARLLKQDL 63
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 168 GTDALTLCFSFSPGFSSTQNLIMQLTDTK--QLVHSFTEDRDGSAVANFTALFPD 225
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 64 SIGNALQITDVKLODAGVRCMISYGADYKRITVKNVAPYK-----INQRLIVDP 117
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 226 AOGNASLRLQRYRVADSGFTCFVSIIRPGSAVAASLQVAAPYKSKSMTEPKDLRPGDT 285
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 118 VTSEHELTCQA-EGYPKAEVITSSDHOVLSGKTTTNSKREKLEFNTSTLRINTTNE 176
; : : : : : : : : : : : : : : : : : : : : : : : : : : : :
```





GenCore version 5.1.3  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - nucleic search, using frame\_plus\_p2n model

Run on: January 12, 2003, 11:11:11 : Search time 62 Seconds  
(without alignments)  
2058.548 Million cell updates/sec

Title: US-09-649-108-1

Perfect score: 1511

Sequence: 1 MRFVFIPTMYHMLNFT.....KCGIDPFNSKSDTHLEET 290

Scoring table:  
BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Total number of hits satisfying chosen parameters: 778172

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 08  
Maximum Match 1008  
Listing first 45 summaries

Command line parameters:  
-MODEL=frame\_plus\_p2n.model -DEV=xlh  
-O=/cgn2.1/USPTO/spool/US09649108/runat\_12012003\_101123\_13963/app\_query.fasta\_1.455  
-DB=Published.Applications\_MA -OPMT=Starlap -SUFFIX=rnpb -MINMATCH=0.1  
-LOOPCL=0 -DOEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=blsum62  
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100  
-MAXLEN=200000000 -USER=US09649108.ecgn\_1.1.33-Runat\_12012003\_101123\_13963  
-NCPU=6 -ICPU=3 -NO\_XLPHY -NO\_MMAP -LARGEQUERY -NEG\_SCORES=0 -WAIT -LONGLOG  
-DEV.TIMEOUT=10 -WARN.TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -Fgapop=6  
-Fgapext=7 -Ygapop=10 -Ygapext=0.5 -DELOP=6 -DELEXT=7

Database : Published Applications\_MA:

1: /cgn2.6/ptodata/2/pubpna/US07\_PUBCOMB.seq:\*  
2: /cgn2.6/ptodata/2/pubpna/PCT\_NEW\_PUB.seq:\*  
3: /cgn2.6/ptodata/2/pubpna/US06\_NEW\_PUB.seq:\*  
4: /cgn2.6/ptodata/2/pubpna/US06\_PUBCOMB.seq:\*  
5: /cgn2.6/ptodata/2/pubpna/US07\_NEW\_PUB.seq:\*  
6: /cgn2.6/ptodata/2/pubpna/PCTUS\_PUBCOMB.seq:\*  
7: /cgn2.6/ptodata/2/pubpna/US08\_NEW\_PUB.seq:\*  
8: /cgn2.6/ptodata/2/pubpna/US08\_PUBCOMB.seq:\*  
9: /cgn2.6/ptodata/2/pubpna/US09\_NEW\_PUB.seq:\*  
10: /cgn2.6/ptodata/2/pubpna/US09\_PUBCOMB.seq:\*  
11: /cgn2.6/ptodata/2/pubpna/US10\_NEW\_PUB.seq:\*  
12: /cgn2.6/ptodata/2/pubpna/US10\_PUBCOMB.seq:\*  
13: /cgn2.6/ptodata/2/pubpna/US60\_NEW\_PUB.seq:\*  
14: /cgn2.6/ptodata/2/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1511	100.0	873	10	US-09-910-174A-22
2	1511	100.0	1553	12	US-10-002-775-3
3	1511	100.0	1604	10	US-09-875-338-1
4	1511	100.0	3575	10	US-09-796-858-41

Sequence	Score	Query Match	Length	ID	Description
Sequence 3, Appl1	1511	100.0	873	10	US-09-875-338-3
Sequence 1, Appl1	1184	78.4	968	12	US-10-002-775-1
Sequence 4, Appl1	1134	75.0	1443	10	US-09-875-338-4
Sequence 10, Appl1	1050	69.5	3593	12	US-10-002-775-10
Sequence 43, Appl1	925.5	61.3	891	10	US-09-796-858-43
Sequence 10728, A	726	48.0	464	10	US-09-867-701-10728
Sequence 2957, Ap	713	47.2	497	10	US-09-867-701-2957
Sequence 3636, Ap	565	37.4	442	10	US-09-867-701-3636
Sequence 18, Appl	527	34.9	666	10	US-09-875-338-18
Sequence 3, Appl1	411.5	27.2	819	9	US-09-896-913A-3
Sequence 1, Appl1	411.5	27.2	819	10	US-09-794-210-1
Sequence 20, Appl	411.5	27.2	819	10	US-09-910-174A-20
Sequence 3, Appl1	411.5	27.2	819	10	US-09-895-837-3
Sequence 20, Appl	411.5	27.2	842	10	US-09-875-338-20
Sequence 1, Appl1	411.5	27.2	1209	10	US-09-955-866-1
Sequence 1, Appl1	411.5	27.2	1223	9	US-09-896-913A-1
Sequence 1, Appl1	411.5	27.2	1223	10	US-09-895-837-1
Sequence 1, Appl1	411.5	27.2	2229	10	US-09-910-174A-1
Sequence 14, Appl	411.5	27.2	2435	10	US-09-875-338-14
Sequence 16, Appl	381	25.2	1356	10	US-09-875-338-16
Sequence 4, Appl1	346	22.9	1655	9	US-09-896-913A-4
Sequence 3, Appl1	346	22.9	1655	10	US-09-794-210-3
Sequence 6, Appl1	343	22.7	741	9	US-09-895-837-6
Sequence 5, Appl1	343	22.7	741	10	US-09-895-837-5
Sequence 30, Appl	343	22.7	744	10	US-09-910-174A-30
Sequence 10, Appl	315	20.8	951	10	US-09-875-338-10
Sequence 12, Appl	312.5	20.7	951	10	US-09-875-338-12
Sequence 23, Appl	312	20.6	951	10	US-09-910-174A-23
Sequence 2, Appl1	312	20.6	1517	9	US-09-790-622-2
Sequence 63, Appl	312	20.6	1517	10	US-09-789-561-63
Sequence 136, App	312	20.6	1998	9	US-09-978-695A-136
Sequence 136, App	312	20.6	1998	9	US-09-978-695A-136
Sequence 136, App	312	20.6	1998	9	US-09-978-695A-136
Sequence 136, App	312	20.6	1998	9	US-09-999-832A-136
Sequence 136, App	312	20.6	1998	9	US-09-978-695A-136
Sequence 53, Appl	312	20.6	1998	12	US-10-052-586-53
Sequence 6, Appl1	311	20.6	3197	10	US-09-875-338-6
Sequence 19, Appl	311	20.6	3197	10	US-09-875-338-19
Sequence 2, Appl1	310	20.5	951	9	US-09-915-789A-2

#### ALIGNMENTS

RESULT 1  
US-09-910-174A-22  
Sequence 22, Application US/09910174A  
Patent No. US20020106730A1  
GENERAL INFORMATION:  
APPLICANT: Coyle, Anthony J.  
APPLICANT: Fraser, Christopher C.  
APPLICANT: Manning, Stephen  
TITLE OF INVENTION: B7-H2 Molecules, No. US20020106730A1 Members of the B7  
FILE REFERENCE: 35800/236924  
CURRENT APPLICATION NUMBER: US/09/910,174A  
PRIOR FILING DATE: 2001-07-20  
PRIOR APPLICATION NUMBER: US 09/620,461  
NUMBER OF SEQ ID NOS: 32  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO: 22  
LENGTH: 873  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-910-174A-22

Alignment Scores:  
Pred. No.: 5.33e-175  
Score: 1511.00  
Percent Similarity: 100.008  
Best Local Similarity: 100.008  
Length: 873  
Matches: 290  
Conservative: 0  
Mismatch: 0

Query Match: 100.00% Indels: 0  
DB: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-910-174A-22 (1-873)

```
OY 1 MetArgIlePheAlaValPheIlePheMetThrTyrTrpHisLeuAsnAlaPheThr 20
    |||||||
DB 1 ATGAGGATATTGCTGCTCTTATATTCATGACCTACTGGCATTTGCTGAACGCACTTACT 60
OY 21 ValThrValProLysAspLeuTyrValValGluTyrGlySerAsnMetThrIleGluCys 40
    |||||||
DB 61 GTCACGGTTCACAGAGACCATATATGTGTAGAGATGTGATGATGATGATGATGATGATG 120
OY 41 LysPheProValGluLysGlnLeuAspLeuAlaAlaLeuIleValTyrTrpGluMetGlu 60
    |||||||
DB 121 AATATCCAGTAGAAAAACAATTAGACCTGCTGACCTAATTTGCTATTTGGGAATGAG 180
OY 61 AspLysAsnIleIleGlnPheValHisGlyGlnAspLeuLysValGlnHisSerSer 80
    |||||||
DB 181 GATTAAGAACATTATTCATATTGTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 240
OY 81 TyrArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlnAsnAlaAlaLeuGln 100
    |||||||
DB 241 TACAGACAGAGGCGCGGCTGTGAAGAGACCACTCTCCCTGGGAATGCTGCACCTTAC 300
OY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGlyGly 120
    |||||||
DB 301 ATCCAGCATGTGAAATGTCAGGATGAGGAGGCTACCGCTGACATGATGATGATGATG 360
OY 121 AlaAspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140
    |||||||
DB 361 GCGGACTACAGGCAATTAATGTAAGAGTCAATGCCCAATCAACAAACCAACCAAGA 420
OY 141 IleLeuValValAspProValThrSerGluHisGluLeuThrCysGlnAlaGluTyr 160
    |||||||
DB 421 ATTTTGGTGTGATCCAGTCACCTCTGACATGACATGACATGACATGACATGACATG 480
OY 161 ProLysAlaGluValIleThrPheSerSerAspHisGlnValLeuSerGlyLysThrThr 180
    |||||||
DB 481 CCCAAGCGCGAATGCTATCTGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 540
OY 181 ThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuAlaGln 200
    |||||||
DB 541 ACCACCAATTTCCAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 600
OY 201 ThrThrAsnGluIlePheTyrCysThrPheArgArgLeuAspProGluGluAsnHis 220
    |||||||
DB 601 ACACAACTAATGAGATTTTCTACTGACACTTTTATGAGATTTAGATCTTGAGAGAAAC 660
OY 221 ThrAlaGluLeuValIleProGluLeuProLeuAlaHisProProAsnGluArgThrHis 240
    |||||||
DB 661 ACAGCTGAATTTGGTCAATCCAGAACTACCTGACATCTCCCAATGAAGAGAGAGAG 720
OY 241 LeuValIleLeuGlnValIleLeuLeuCysLeuGlyValAlaLeuThrPheIlePheArg 260
    |||||||
DB 721 TTGCTAATCTTGGGAGACCACTTATATGCTTGTGTACACTGACATTCATCTTCCT 780
OY 261 LeuArgLysGlyArgMetLeuAspValLysLysCysGlyIleGlnAspThrAsnSerLys 280
    |||||||
DB 781 TTAGAGAAAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 840
OY 281 LysGlnSerAspThrHisLeuGlnGluThr 290
    |||||||
DB 841 AAGCAAAAGTATACATTTGGAGAGAGAG 870
```

RESULT 2

US-10-002-775-3

Sequence 3, Application US/10002775

Patent No. US20020102651A1

GENERAL INFORMATION:

APPLICANT: Gordon Freeman

APPLICANT: Vassiliki Bousiotis

APPLICANT: Tatiana Chernova

```
APPLICANT: Nelly Malenkovich
TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR
FILE REFERENCE: GNN-004ADV
CURRENT APPLICATION NUMBER: US/10/002,775
CURRENT FILING DATE: 2001-11-02
PRIOR APPLICATION NUMBER: US 09/644,934
PRIOR FILING DATE: 2000-08-23
PRIOR APPLICATION NUMBER: 60/150,390
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 3
LENGTH: 1553
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (53)..(922)
US-10-002-775-3
```

#### Alignment Scores:

Pred. No.:	1,27e-174	Length:	1553
Score:	1511.00	Matches:	290
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	12	Gaps:	0

US-09-649-108-1 (1-290) x US-10-002-775-3 (1-1553)

```
OY 1 MetArgIlePheAlaValPheIlePheMetThrTyrTrpHisLeuAsnAlaPheThr 20
    |||||||
DB 53 ATGAGGATATTGCTGCTCTTATATTCATGACCTACTGGCATTTGCTGAACGCACTTACT 112
OY 21 ValThrValProLysAspLeuTyrValValGluTyrGlySerAsnMetThrIleGluCys 40
    |||||||
DB 113 GTCACGGTTCACAGAGACCATATATGTGTAGAGATGTGATGATGATGATGATGATGATG 172
OY 41 LysPheProValGluLysGlnLeuAspLeuAlaAlaLeuIleValTyrTrpGluMetGlu 60
    |||||||
DB 173 AATATCCAGTAGAAAAACAATTAGACCTGCTGACATTAATTTGCTATTTGGGAATGAG 232
OY 61 AspLysAsnIleIleGlnPheValHisGlyGlnAspLeuLysValGlnHisSerSer 80
    |||||||
DB 233 GATTAAGAACATTATTCATATTGTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 292
OY 81 TyrArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlnAsnAlaAlaLeuGln 100
    |||||||
DB 293 TACAGACAGAGGCGCGGCTGTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 352
OY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGlyGly 120
    |||||||
DB 353 ATCAGCATGTGAAATGTCAGAGATGAGAGGCTGACCGCTGCATGATGACGTATGTGCT 412
OY 121 AlaAspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140
    |||||||
DB 413 GCGGACTACAGGCAATTAATGTAAGAGTCAATGCCCAATCAACAAATCAACCAAGA 472
OY 141 IleLeuValValAspProValThrSerGluHisGluLeuThrCysGlnAlaGluTyr 160
    |||||||
DB 473 ATTTTGGTGTGATCCAGTCACCTCTGACATGACATGACATGACATGACATGACATG 532
OY 161 ProLysAlaGluValIleThrPheSerSerAspHisGlnValLeuSerGlyLysThrThr 180
    |||||||
DB 533 CCCAAGCGCGAATGCTATCTGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 592
OY 181 ThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuAlaGln 200
    |||||||
DB 593 ACCACCAATTTCCAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 652
OY 201 ThrThrAsnGluIlePheTyrCysThrPheArgArgLeuAspProGluGluAsnHis 220
    |||||||
DB 653 ACACAACTAATGAGATTTTCTACTGACACTTTTATGAGATTTAGATCTTGAGAGAAAC 712
```



QY 221 ThrAlaGluLeuValIleProGluLeuProLeuAlaHisProProAsnGluArgThrHis 240  
| | | | |  
Db 713 ACAGCTGAATGGTCTACACCCAGACATCACTGTCACATCTCCAAATGGAAGACTCAC 772  
| | | | |  
QY 241 LeuValIleLeuGlyAlaIleLeuLeuCysLeuGlyValAlaLeuThrPheIlePheArg 260  
| | | | |  
Db 773 TTGGTAATTTCTGGAGCCATCTTATTAATGCTGTGTACACGACATTCATCTTCGCT 832  
| | | | |  
QY 261 LeuArgLysGlyArgMetLeuAspValLysCysGlyIleGlnAspThrAsnSerLys 280  
| | | | |  
Db 833 TTAAGAAAAGGAGGAATGATGATGTAATAAATGTGTCATCCAGATACAACTCAAG 892  
| | | | |  
QY 281 LysGlnSerAspThrHisLeuGluThr 290  
| | | | |  
Db 893 AAGCAAGTGATACATCTTGAGAGAGAGC 922  
| | | | |  
RESULT 3  
Sequence 1, Application US/09875338  
Patent No. US20020095024A1  
GENERAL INFORMATION:  
APPLICANT: MIKESSELL, GLEN E.  
APPLICANT: CHANG, HAN  
APPLICANT: FINGER, JOSHUA N.  
APPLICANT: YANG, GUOCHEN  
APPLICANT: LU, PIN  
APPLICANT: ZHOU, XIA-DI  
APPLICANT: PEACH, ROBERT  
TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
FILE OF INVENTION: IMMUNOMODULATION  
FILE REFERENCE: 3053-4071US2  
CURRENT APPLICATION NUMBER: US/09/875,338  
CURRENT FILING DATE: 2001-06-06  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: 60/272,107  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: 60/209,811  
PRIOR FILING DATE: 2000-06-06  
NUMBER OF SEQ ID NOS: 94  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 1  
LENGTH: 1604  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-875-338-1  
Alignment Scores:  
Pred. No.: 1,33e-174 Length: 1604  
Best Similarity: 1511.00 Matches: 290  
Best Local Similarity: 100.00% Conservative: 0  
Query Match: 100.00% Mismatches: 0  
Indels: 0  
Gaps: 0  
US-09-649-108-1 (1-290) x US-09-875-338-1 (1-1604)  
QY 1 MetArgIlePheAlaValaIlePheMetThrTyrTrpHisLeuAsnAlaPheThr 20  
| | | | |  
Db 93 ATGAGGATATTTGCTCTTTATATTCATGACCTACTGCGATTGTGGAACGCAATTACT 152  
| | | | |  
QY 21 ValThrValProLysAspLeuTyrValValGluTyrGlySerAsnMetThrIleGluCys 40  
| | | | |  
Db 153 GTCACAGGTTCCCAAGACCTATATGTGTAGAGTATGTGACAAATGTGCAATTTGATGC 212  
| | | | |  
QY 41 LysPheProValGluLysGlnLeuAspLeuAlaIleLeuIleValTyrTrpGluMetGlu 60  
| | | | |  
Db 213 AAATTCCTCCAGTAAAGAAATAGACCTGCTGCACTAATGCTATTTGGAATGAGAG 272  
| | | | |  
QY 61 AspLysAsnIleIleGlnPheValHisGlyGluAspLeuLysValGlnHisSerSer 80  
| | | | |  
Db 273 GATTAAGAAATATTTCAATTTGTGCTAGAGAGAGAGACCTGTAAGCTTCAGCATAGTACG 332  
| | | | |  
QY 81 TyrArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuLysAsnAlaIleGln 100  
| | | | |

Db 333 TACAGACAGAGGGCCGCTGTGAAGACAGCTCCCTGGGAAATGCTGCACTTCAG 392  
| | | | |  
QY 101 IleThrAspValLysLeuGlnAspAlaGlyValIleThrArgCysMetIleSerTyrGlyGly 120  
| | | | |  
Db 393 ATCAACAGATGTGAATTTGACAGATGACAGGGGTGTACGGGTGATGATGATGATGATG 452  
| | | | |  
QY 121 AlaAspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140  
| | | | |  
Db 453 GCGAGCTACAGCAAGCAATTTACTGTGAAGTCAATCCCATACCAACAAATCAACCAAGA 512  
| | | | |  
QY 141 IleLeuValValAspProValIleThrSerGlnHisGlyLeuThrCysGlnAlaGluGlyTyr 160  
| | | | |  
Db 513 ATTTGGTGTGTGATCCAGTACCTCTGACATCACTGACATGATGATGATGATGATGATG 572  
| | | | |  
QY 161 ProLysAlaGluValIleThrPheThrSerAspHisGlnValLeuSerGlyLysThrThr 180  
| | | | |  
Db 573 CCCAAGCCCAAGTCACTGTGACAGAGTACCATCACTGATGATGATGATGATGATGATG 632  
| | | | |  
QY 181 ThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuArgIleAsn 200  
| | | | |  
Db 633 ACCACCAATTTCCAG 692  
| | | | |  
QY 201 ThrThrAsnSerLysLeuIlePheTyrCysThrPheArgArgLeuAspProGluGluAsnHis 220  
| | | | |  
Db 693 ACAACACATATGATGATTTCTACTGCACTTTTATAGAGATTAATCTCTGAGGAACCAT 752  
| | | | |  
QY 221 ThrAlaGluLeuValIleProGluLeuProLeuAlaHisProProAsnGluArgThrHis 240  
| | | | |  
Db 753 ACAGCTGAATGGTCTACACCCAGACATCACTGTCACATCTCCAAATGGAAGACTCAC 812  
| | | | |  
QY 241 LeuValIleLeuGlyAlaIleLeuLeuCysLeuGlyValAlaLeuThrPheIlePheArg 260  
| | | | |  
Db 813 TTGGTAATTTCTGGAGCCATCTTATTAATGCTGTGTGTACACGACATTCATCTTCGCT 872  
| | | | |  
QY 261 LeuArgLysGlyArgMetLeuAspValLysCysGlyIleGlnAspThrAsnSerLys 280  
| | | | |  
Db 873 TTAAGAAAAGGAGGAATGATGATGTAATAAATGTGTCATCCAGATACAACTCAAG 932  
| | | | |  
QY 281 LysGlnSerAspThrHisLeuGluThr 290  
| | | | |  
Db 933 AAGCAAGTGATACATCTTGAGAGAGAGC 962  
| | | | |  
RESULT 4  
US-09-796-858-41  
Sequence 41, Application US/09796858  
Patent No. US20020055139A1  
GENERAL INFORMATION:  
APPLICANT: HOLTMANN, Douglas  
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC,  
FILE REFERENCE: 7853-226-999  
CURRENT APPLICATION NUMBER: US/09/796,858  
CURRENT FILING DATE: 2001-03-01  
PRIOR APPLICATION NUMBER: 09/223,094  
PRIOR FILING DATE: 1998-12-30  
PRIOR APPLICATION NUMBER: 09/223,546  
PRIOR FILING DATE: 1998-12-30  
PRIOR APPLICATION NUMBER: 09/224,246  
PRIOR FILING DATE: 1998-12-30  
PRIOR APPLICATION NUMBER: 09/312,359  
PRIOR FILING DATE: 1998-05-14  
PRIOR APPLICATION NUMBER: 09/336,536  
PRIOR FILING DATE: 1999-06-18  
PRIOR APPLICATION NUMBER: 09/342,687  
PRIOR FILING DATE: 1999-06-29  
PRIOR APPLICATION NUMBER: 09/399,723  
PRIOR FILING DATE: 1999-09-20  
PRIOR APPLICATION NUMBER: 09/471,179  
PRIOR FILING DATE: 1999-12-23  
PRIOR APPLICATION NUMBER: 09/474,071  
PRIOR FILING DATE: 1999-12-29  
PRIOR APPLICATION NUMBER: 09/474,072

```

: PRIOR FILING DATE: 1999-12-29
: PRIOR APPLICATION NUMBER: 09/572,002
: PRIOR FILING DATE: 2000-05-14
: PRIOR APPLICATION NUMBER: 09/597,993
: PRIOR FILING DATE: 2000-06-12
: PRIOR APPLICATION NUMBER: 09/599,596
: PRIOR FILING DATE: 2000-06-22
: PRIOR APPLICATION NUMBER: 09/606,565
: PRIOR FILING DATE: 2000-06-29
: PRIOR APPLICATION NUMBER: 09/365,164
: PRIOR FILING DATE: 1999-07-30
: PRIOR APPLICATION NUMBER: 09/630,334
: PRIOR FILING DATE: 2000-07-31
: PRIOR APPLICATION NUMBER: 09/665,666
: PRIOR FILING DATE: 2000-09-20
: NUMBER OF SEQ ID NOS: 50
: SEQ ID NO 41
: LENGTH: 3575
: TYPE: DNA
: ORGANISM: Homo sapiens
: -796-858-41

Alignment Scores:
Pred. No.: 4,46e-174 Length: 3575
Score: 1511.00 Matches: 290
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
DB: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-796-858-41 (1-3575)
OY 1 Metarglllephalalvalpheilephemetlthrttrphisleuleuasnalapherhr 20
DB 59 ATGAGGATATTGGCTCTTTATATTCATGACCTACTGGCATTTGCGAAGCATTTACT 118
OY 21 ValThValProlysaspLeuTyValValGluTyGlySerasnmetlhrllleglucys 40
DB 119 GTCACGGTCCCAAGACCTATATGTGTAGATATGTCATATGCAATATGCAATGATGC 178
OY 41 LysPheProvalGluLysGlnLeuaspLeuAlaAlaLeuIleValTyTrpGluMetGlu 60
DB 179 AAATTCCTCCAGTAAACCAATATGACCTGCTGCTCATTTGCTATTTGGAAATGAG 238
OY 61 AspLysAsnIlelleGlnPheValIHisGlyGluGluaspLeuValGlnHisSerSer 80
DB 239 GATTAAGAACTATTATTAATTTGTGCTATGAGAGGAAAGCACTGAAGGTTCCAGCATAGAC 238
OY 81 TyArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlnLysAlaAlaLeuGln 100
DB 299 TACAGACAGAGGCGCGCTGTGAAGACCACTCTCCCTGGGAATGCTGCACATTGAC 358
OY 101 lIeThrAspValLysLeuGlnaspAlaGlyValTyTrpGlyMetIleSerTyGlyGly 120
DB 359 ATCAGCATGTGTAATTCGACGATGACGAGGGGTACCCGCTGATGATACGTATGTGTGT 418
OY 121 AlaAspTyLysArgLleThrValLysValAsnAlaProTyTrpLysnLysIleAsnGlnArg 140
DB 419 GCGGACTACAGGCAATTAAGTGAAGTCAATGCCCAATCAACAAACCAACCAAGA 478
OY 141 lIeLeuValValAspProValThrSerGlnHisGluLeuThrCysGlnAlaGluGlyTr 160
DB 479 ATTTTGCTGTGGATCCAGTCACTGACCTGTGAACATGAACTGCAATGTCAGGTGAGGGTTAC 538
OY 161 ProLysAlaGluValIleTrpThrSerSerAspHisGlnValLeuSerGlyLysThrThr 180
DB 539 CCCAAGCGCAAGTCACTGTGACACAGACGATCAATCAATCTCTGATGTAAGACCAAC 598
OY 181 ThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuAlaGlyIleAsn 200
DB 599 ACCAACAATTCACAGAGAGGAGGAAAGCTTTTAAATGTGACAGACACATGAAATTCAC 658
OY 201 ThrThrAsnGluIlePheTyGlyTrpPheArgArgLeuAspProGluGluAsnHis 220
```

```

DB 659 ACAACAATATGAGATTTTCTACTGCACTTTTGGAGATTAGCTCTGAGAAACCAT 718
OY 221 ThrAlaGluLeuValIleProGluLeuProLeuAlaHisProProAsnGluArgThrHis 240
DB 719 ACAGCGAATGTGCTATCCAGAACTACCTGTGACATCTCTCAATATGAAGACATCAC 778
OY 241 LeuValIleLeuGlyAlaIleLeuLeuCysLeuGlyValAlaLeuThrPheIlePheArg 260
DB 779 TTGTAATTCGTGGAGCCATCTATATATGCTTGTGTACACTGACATTCATCTTCCTG 838
OY 261 LeuArgLysGlyArgMetLeaspValLysLysCysGlyIleGlnAspThrAsnSerLys 280
DB 839 TTAAAGAAAAGGGAATGATGATGTGAAAAAATGTGTCATCCAAAGTACAACTCAAG 898
OY 281 LysGlnSerAspThrHisLeuGluGluThr 290
DB 899 AAGCAAGTGTATACACTTTTGGAGAGACG 928

RESULT 5
US-09-875-338-3
: Sequence 3, Application US/09875338
: Patent No. US20020095024A1
: GENERAL INFORMATION:
: APPLICANT: MIKESSELL, GLEN E.
: APPLICANT: CHANG, HAN
: APPLICANT: FINGER, JOSHUA N.
: APPLICANT: YANG, GUCHEN
: APPLICANT: LU, PIN
: APPLICANT: ZHOU, XIA-DI
: TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
: TITLE OF INVENTION: IMMUNOMODULATION
: FILE REFERENCE: 3053-407JUS2
: CURRENT APPLICATION NUMBER: US/09/875,338
: CURRENT FILING DATE: 2001-06-06
: PRIOR APPLICATION NUMBER: 60/272,107
: PRIOR FILING DATE: 2001-02-28
: PRIOR APPLICATION NUMBER: 60/209,811
: PRIOR FILING DATE: 2000-06-06
: NUMBER OF SEQ ID NOS: 94
: SOFTWARE: PatentIn Ver. 2.1
: SEQ ID NO 3
: LENGTH: 3600
: TYPE: DNA
: ORGANISM: Homo sapiens
: US-09-875-338-3

Alignment Scores:
Pred. No.: 4,51e-174 Length: 3600
Score: 1511.00 Matches: 290
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
DB: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-875-338-3 (1-3600)
OY 1 Metarglllephalalvalpheilephemetlthrttrphisleuleuasnalapherhr 20
DB 93 ATGAGGATATTGGCTCTTTATATTCATGACCTACTGGCATTTGCGAAGCATTTACT 152
OY 21 ValThValProlysaspLeuTyValValGluTyGlySerasnmetlhrllleglucys 40
DB 153 GTCACGGTCCCAAGGACCTATATGTGTAGAGTATGTCGAATATGACAATTTGAATGC 212
OY 41 LysPheProvalGluLysGlnLeuaspLeuAlaAlaLeuIleValTyTrpGluMetGlu 60
DB 213 AAATTCCTCAAGAAAACAATTAAGACCTGCTGCATTAATTTGCTATTGGGAAATGAG 272
OY 61 AspLysAsnIlelleGlnPheValIHisGlyGluGluaspLeuLysValGlnHisSerSer 80
DB 273 GATTAAGAACTATTATTAATTTGTGCAATGAGAGGAAAGCACTGAAGGTTCCAGCATAGTAC 332
```

QY 81 TyrArgInaArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlyAsnAlaAlaLeuGln 100  
 Db 333 TACAGACAGAGGCGCGCTGTGAGACACAGCTCTCCCTGGGAAATGCTCCACTTACG 392  
 QY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGly 120  
 Db 393 ATCAACATGTGAATGTCAGAGATGCAGGGGTGTACCCCTCATGATCAGCATGTGGT 452  
 QY 121 AlaAspTyrLysArgGlyIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140  
 Db 453 GCCGACTACAGCGAATTAAGTGAAGTCAATGCCCATCAACAAATACCAAGGA 512  
 QY 141 IleLeuValValAspProValThrSerGlnHisGlnLeuThrCysGlnAlaGlyLys 160  
 Db 513 ATTTGGTTGGATCCAGTCACTCTGAACATGACATGACATGACAGCTGAGGGCTAC 572  
 QY 161 ProLysAlaGluValIleTyrThrSerSerAspHisGlnValLeuSerGlyLysThr 180  
 Db 573 CCCAAGGCCGAGATCTGTGACAAGCAGTGCACATCAAGTCTGAGTGAAGACCAC 632  
 QY 181 ThrThrAsnSerLysArgGlnGluLysLeuPheAsnValThrSerThrLeuArgIleAsn 200  
 Db 633 ACCACCAATTCACAGAGAGAGAGAGAGCTTTTCAATGTGACACAGACACTGAGATCAAC 692  
 QY 201 ThrThrAsnGlnIlePheTyrCysThrPheArgArgLeuAspProGlnGlnAsnHis 220  
 Db 693 ACACACATTAATGATATTTCTACTGCACCTTTAGGAGATTAGATCCTCGAGAAACCAT 752  
 QY 221 ThrAlaGluLeuValIleProGlnLeuProLeuAlaHisProAsnGlnArgThrHis 240  
 Db 753 ACAGCAATTTGTCATCCCGACACTGCTGACACATCCTCCAAATGAAAGAGCTAC 812  
 QY 241 LeuValIleLeuGlyAlaIleLeuLeuCysLeuGlyValAlaLeuThrPheIlePheArg 260  
 Db 813 TTGCTAATTTGTGGAGCACTTATTAATGCTGTGTAGACACTGACATTCATCTTCGT 872  
 QY 261 LeuArgLysGlyArgMetLeuAspValLysLysCysGlyIleGlnAspThrAsnSerLys 280  
 Db 873 TTAAAGAAAGGAGCAATGATGATGTCAAAAATGTGGCATCCAAAGATCAAACTCAAAG 932  
 QY 281 LysGlnSerAspThrHisLeuGlnGluThr 290  
 Db 933 AACCAAGTGATACACATTTGGAGAGACG 962  
 RESULT 6  
 US-10-002-775-1  
 Sequence 1, Application US/10002775  
 Patent No. US20020102651A1  
 GENERAL INFORMATION:  
 APPLICANT: Gordon Freeman  
 APPLICANT: Vassiliki Bousiots  
 APPLICANT: Tatyana Chernova  
 APPLICANT: Nelly Malenkovich  
 TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR  
 FILE REFERENCE: GNN-004ADV  
 CURRENT APPLICATION NUMBER: US/10/002,775  
 CURRENT FILING DATE: 2001-11-02  
 PRIOR APPLICATION NUMBER: US 09/644,934  
 PRIOR FILING DATE: 2000-08-23  
 PRIOR APPLICATION NUMBER: 60/150,390  
 PRIOR FILING DATE: 1999-08-23  
 NUMBER OF SEQ ID NOS: 11  
 SOFTWARE: PatentIn Ver. 2.0  
 SEQ ID NO 1  
 LENGTH: 968  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: COS  
 LOCATION: (59)..(793)  
 US-10-002-775-1

## Alignment Scores:

Pred. No.: 4,69e-135 Length: 968  
 Score: 1184.00 Matches: 227  
 Percent Similarity: 100.00% Conservative: 0  
 Best Local Similarity: 100.00% Mismatches: 0  
 Query Match: 78.36% Indels: 0  
 DB: 12 Gaps: 0

US-09-649-108-1 (1-290) x US-10-002-775-1 (1-968)

QY 1 MetArgIlePheAlaValPheIlePheMetThrTyrTrpHisLeuLeuAsnAlaPheThr 20  
 Db 59 ATGAGATATTTGCTGTCTTATATTCATGACCTGACCTGACATTCCTGAGCCATTACT 118  
 QY 21 ValThrValProLysAspLeuTyrValValGluTyrGlySerAspMetThrIleGlyCys 40  
 Db 119 GTACGGTCCCAAGGACCTATATGTGTAGAGTGTGTAGCAATATGCAATTAATGC 178  
 QY 41 LysPheProValGluLysGlnLeuAspLeuAlaAlaLeuIleValTyrTrpGlnMetGlu 60  
 Db 179 AAATTCACAGTAGAAAAACATTTAGACCTGGCTGCACCTATATTCATTTGGAAATGGAG 238  
 QY 61 AspLysAsnIleIleGlnPheValHisGlyGlnAspLeuLysValGlnHisSerSer 80  
 Db 239 GATAAGAACATTATTCATTTGTGCATGAGAGAGAACCTGGAAGCTTCAGCATGTAGTC 298  
 QY 81 TyrArgInaArgAlaArgLeuLeuLysAspGlnLeuSerLeuGlyAsnAlaAlaLeuGln 100  
 Db 299 TACAGACAGAGGCGCGCTGTGAGACACAGCTCTCCCTGGGAAATGCTGCACTTACG 358  
 QY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGly 120  
 Db 359 ATCAACATGTGAATTTGACAGATGCAGGGGTGTACCCCTCATGATACCTATGTGTGCT 418  
 QY 121 AlaAspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140  
 Db 419 GCCGACTACAGCGAATTAAGTGAAGTCAATGCCCATCAACAAATACCAAGGA 478  
 QY 141 IleLeuValValAspProValThrSerGlnHisGlnLeuThrCysGlnAlaGlyLys 160  
 Db 479 ATTTGGTTGGATCCAGTCACTCTGACATGACATGACATGACATGACAGCTGAGGGCTAC 538  
 QY 161 ProLysAlaGluValIleTyrThrSerSerAspHisGlnValLeuSerGlyLysThr 180  
 Db 539 CCCAAGGCCGAGATCTGTGACAAGCAGTGCACATCAAGTCTGAGTGAAGACCAC 598  
 QY 181 ThrThrAsnSerLysArgGlnGluLysLeuPheAsnValThrSerThrLeuArgIleAsn 200  
 Db 599 ACCACCAATTCACAGAGAGAGAGAGCTTTTCAATGTGACACAGACACTGAGATTCAC 658  
 QY 201 ThrThrAsnGlnIlePheTyrCysThrPheArgArgLeuAspProGlnGlnAsnHis 220  
 Db 659 ACACACATTAATGATATTTCTACTGCACCTTTAGGAGATTAGATCCTGAGAAACCAT 718  
 QY 221 ThrAlaGluLeuValIlePro 227  
 Db 719 ACAGCTGAATGTGATCCCA 739  
 RESULT 7  
 US-09-875-338-4  
 Sequence 4, Application US/09875338  
 Patent No. US20020095024A1  
 GENERAL INFORMATION:  
 APPLICANT: MIKESSEL, GLEN E.  
 APPLICANT: CHANG, HAN  
 APPLICANT: FINGER, JOSHUA N.  
 APPLICANT: YANG, GUCHEN  
 APPLICANT: LU, PIN  
 APPLICANT: ZHOU, XIA-DI  
 APPLICANT: PEACH, ROBERT  
 TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
 FILE REFERENCE: 3053-4071US2

```

: CURRENT APPLICATION NUMBER: US/09/875,338
: CURRENT FILING DATE: 2001-06-06
: PRIOR APPLICATION NUMBER: 60/272,107
: PRIOR FILING DATE: 2001-02-28
: PRIOR APPLICATION NUMBER: 60/209,811
: PRIOR FILING DATE: 2000-06-06
: NUMBER OF SEQ ID NOS: 94
: SOFTWARE: PatentIn Ver. 2.1
: SEQ ID NO 4
: LENGTH: 1443
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Synthetic
: OTHER INFORMATION: fusion construct
US-09-875-338-4

Alignment Scores:
Pred. No.: 1,07e-128 Length: 1443
Score: 1134.00 Matches: 217
Percent Similarity: 100.00% Conservative: 1
Best Local Similarity: 99.54% Mismatches: 0
Query Match: 75.05% Indels: 0
DB: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-875-338-4 (1-1443)
OY 22 ThrValProLysAspLeuTyValValGluTyrGlySerAsnMetThrIleGluCysLys 41
DB 76 AGTGTTCCCAAGAGACCTATATGTGTGTRAGATATGTCATATGCAATGTAATGCAAA 135
OY 42 PheProValGluLysGlnLeuAspLeuAlaLeuIleValTyrTrpGluMetGluAsp 61
DB 136 TTCCCAGTGAATAAACAATTAGACCTGGCTGCACTAATGTCTGATTTGGAAATGAGAGAT 195
OY 62 LysAsnIleIleGlnPheValHisGlyGluGlnAspLeuLysValGlnHisSerSerTyr 81
DB 196 AAGAAATTAATTCATATTTGTCATGAGAGAGAAAGACCTGAAAGTTCGCAATAGACTAC 255
OY 82 ATGGTATGATATGATGLeuLeuLysAspGlnLeuSerLeuGlnLysAsnAlaLeuGlnIle 101
DB 256 AGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 315
OY 102 ThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGlyGlyAla 121
DB 316 ACAGATGTGAATTTGACAGATGTCAGAGGCTGTACCGCTGATGATGATGATGATGATG 375
OY 122 AspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArgIle 141
DB 376 GACTACAGAGAAATCTGTAAGAAAGTCAATGCCCCATCAACAAACAAACAAAGAAAT 435
OY 142 LeuValValAspProValThrSerGluHisGlnLeuThrCysGlnAlaGluGlyTyrPro 161
DB 436 TTGGTTGTGATCCAGTCACTCTGACATGAACTGACATGTCAGGCTGAGGCTTACCCC 495
OY 162 LysAlaGluValIleTyrThrSerSerAspHisGlnValLeuSerGlyLysThrThrThr 181
DB 496 AAGCGGAGATCATCTGGACAGACAGACCATCAAGTCTGATGTTAGACACACACACC 555
OY 182 ThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuArgIleAsnThr 201
DB 556 ACCAAATTCACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 615
OY 202 ThrThrAsnGluIlePheTyrCysThrPheArgArgLeuAspProGluGluAsnHisThr 221
DB 616 ACACAAATAGATGATTTTCTACTGCACTTTTATGAGATTAATCTCTGAGAAACATACA 675
OY 222 AlaGluLeuValIleProGluLeuProLeuAlaHisProProAsnGluArgThr 239
DB 676 GCTGAATTTGATCTCCAGAACTACCTCTGACATCTCTCAATGAAGAGACT 729
RESULT 8
US-10-002-775-10
```

```

: Sequence 10, Application US/10002775
: Patent No. US20020102651A1
: GENERAL INFORMATION:
: APPLICANT: Gordon Freeman
: APPLICANT: Vassiliki Bousioliotis
: APPLICANT: Tatyana Chernova
: APPLICANT: Nelly Malenkovich
: TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR
: FILE REFERENCE: GNN-004ADV
: CURRENT APPLICATION NUMBER: US/10/002,775
: CURRENT FILING DATE: 2001-11-02
: PRIOR APPLICATION NUMBER: US 09/644,934
: PRIOR FILING DATE: 2000-08-23
: PRIOR APPLICATION NUMBER: 60/150,390
: NUMBER OF SEQ ID NOS: 11
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 10
: LENGTH: 3593
: TYPE: DNA
: ORGANISM: Mus musculus
: FEATURE:
: NAME/KEY: CDS
: LOCATION: (17)..(889)
US-10-002-775-10

Alignment Scores:
Pred. No.: 7.42e-118 Length: 3593
Score: 1050.00 Matches: 202
Percent Similarity: 81.10% Conservative: 34
Best Local Similarity: 69.42% Mismatches: 53
Query Match: 69.49% Indels: 2
DB: 12 Gaps: 2

US-09-649-108-1 (1-290) x US-10-002-775-10 (1-3593)
OY 1 MetArgIlePheAlaValPheIlePheMetThrTyrTrpHisLeuLeuAsnAlaPheThr 20
DB 17 ATGAGATATTTCTGCTGCAATATATTCACAGCCGCTGTCATCTGCAACGGCGCTTACT 76
OY 21 ValThrAlaProLysAspLeuTyValValGluTyrGlySerAsnMetThrIleGluCys 40
DB 77 ATCAGGCGCTCCAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 136
OY 41 LysPheProValGluLysGlnLeuAspLeuAlaLeuIleValTyrTrpGluMetGlu 60
DB 137 AGATTCCTGTAGACAGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 196
OY 61 AspLysAsnIleIleGlnPheValHisGlyGluGlnAspLeuLysValGlnHisSerSer 80
DB 197 GATGAGCAATGATTCAGTTTGTGGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 256
OY 81 TyrArgGlnArgAlaArgGluLeuLysAspGlnLeuSerLeuGlnAsnAlaLeuGln 100
DB 257 TTCAGGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 316
OY 101 IleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIleSerTyrGlyGly 120
DB 317 ATCAGACAGCTCAAGCTGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 376
OY 121 AlaAspTyrLysArgIleThrValLysValAsnAlaProTyrAsnLysIleAsnGlnArg 140
DB 377 GCGGATACAAAGCAAGATCACGCTGAAAGTCAATGCCCATTCACCAATATCAACAGAGA 436
OY 141 IleLeuValValAspProValThrSerGluHisGlnLeuThrCysGlnAlaGluGlyTyr 160
DB 437 ATT--TCCGTGATTCAGGCACTTCTGACATGTAACCTAATATGTCAGGCGAGGTTAT 493
OY 161 ProLysAlaGluValIleTyrThrSerSerAspHisGlnValLeuSerGlyLysThrThr 180
DB 494 CAGAGAGCTAGATTAATCTGAGACAAACAGTGCACCAACCCGATGATGGAAAGAGAGT 553
OY 181 ThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSerThrLeuArgIleAsn 200
```



```

Db      889 AGC 891
:::
RESULT 10
US-09-867-701-10728
: Sequence 10728, Application US/09867701
: Patent No. US2002013237A1
: GENERAL INFORMATION:
: APPLICANT: Aglate, Paul A.
: APPLICANT: Jones, Robert
: APPLICANT: Harlocker, Susan L.
: TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
: FILE REFERENCE: 210121.497
: CURRENT APPLICATION NUMBER: US/09/867, 701
: CURRENT FILING DATE: 2001-05-29
: NUMBER OF SEQ ID NOS: 10912
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 10728
: ENCTH: 464
: TPE: DNA
: ORGANISM: Homo sapien
US-09-867-701-10728

Alignment Scores:
Pred. No.: 1,1e-79 Length: 464
Score: 726.00 Matches: 140
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 48.05% Indels: 0
Db: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-867-701-10728 (1-464).
OY 88 LeuYsAspGlnLeuSerLeuGlyAsnAlaIleuGlnIleThrAspVallySLeuGln 107
Db 9 TTGAAGAGCAGCAGCTCCCTCGGAAATGCTCAGCTCAGATCAGATGTAATTCAG 68
OY 108 AspAlaGlyValTYrArgCysMetIleSerTYrGlyAlaAspTYrLYsArgIleThr 127
Db 69 GATGAGGGGGGTACCCGCTGCATCATCAGCTATGTTGTGGCGGCTCAAGCGAATTACT 128
OY 128 VallySValAsnAlaProTYrAsnLYsIleAsnGlnArgIleuValIleAspProVal 147
Db 129 GTGAAGCATATGCCCATCAACAAATTCACCAAGAAATTTGGTTGTGATCCAGTC 188
OY 148 ThrSerGlnHisGluLeuThrCysGlnAlaGluGlyTYrProLYsAlaGluValIleTrp 167
Db 189 ACCTCTGAACATGAACATGACATGTCCAGGCTGAGGGCTAACCCCAAGGCCGAAGTATCTGG 248
OY 168 ThrSerSerAspHisGlnValIleuSerGlyLYsThrThrThrThrAsnSerLYsArgGlu 187
Db 249 ACAAGCAGTACGACATCAAGATCCGTGAGTGTGAAGACCAACACCAATTCACAGAGAG 308
OY 188 GluLYsLeuPheAsnValIleThrSerThIleuArgIleAsnThrThrThrAsnGluIlePhe 207
Db 309 GAGAAGCTTTTCATGTGTACACAGACACTGGAATTCACACAACTAATGACATTTTC 368
OY 208 TYrCTThrPheArgArgLeuAspProGluIleuAsnHisThrAlaGluLeuValIlePro 227
Db 369 TACTGCACTTTTAGGAGATTAGATTCCTGAGGAAAACCATATACGCTGAATGTGATCCCA 428

RESULT 11
US-09-867-701-2957
: Sequence 2957, Application US/09867701
: Patent No. US2002013237A1
: GENERAL INFORMATION:
: APPLICANT: Aglate, Paul A.
: APPLICANT: Jones, Robert
: APPLICANT: Harlocker, Susan L.
: TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
: FILE REFERENCE: 210121.497

```

[illegible]

Alignment Scores:  
Pred. No.: 4,39e-60 Length: 442  
Score: 565.00 Matches: 108  
Percent Similarity: 100.00% Conservative: 0  
Best Local Similarity: 100.00% Mismatches: 0  
Query Match: 37.398 Indels: 0  
DB: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-867-701-3638 (1-442)

QY 120 GYVAlAspTyrtysArglleThrrVallAspAlaProtyrAnlystleasnln 139  
DB 442 GGTGGCCGACTACCAAGCAATGCTGAAAGTCAATGCCCAATACCAAAATCAACAA 383  
QY 140 ArgllleuValValAspProValThrsrGlnHslgluLeuthrCysGlnAlaGlu 159  
DB 382 AGAATTTTGGTTGCTGATCCAGTCACTGCAACATGATGACATGCTGAGGCGC 323  
QY 160 TyrProLysAlaGluValIleTrrPthSerSerAspHslGlnValLeuSerGlyLysThr 179  
DB 322 TACCCCAAGGCCCAAGTCACTGACACAGCAGTGCATCAAGTCTGAGTGAAGACC 263  
QY 180 ThrrThrasnSerLysArgGluGluLysLeuPheasnValThrsrrThleArglle 199  
DB 262 ACCACCAACCAATTCACAGAGAGAGAACCTTTTCATGTGACACACACATGAGATC 203  
QY 200 AsnThrrThrasnGluIlePheTyrCysThrrPheArgLysLeuAspProGluGluAsn 219  
DB 202 AACACACACATTAATGAGATTTTCTACTGCACTTTTAGGAGATAGATCTGTGAGAAAC 143  
QY 220 HistHlaGluLeuValIlePro 227  
DB 142 CATACAGCTGAATTGGTCAATCCA 119

## RESULT 13

US-09-875-338-18  
; Sequence 18, Application US/09875338  
; Patent No. US20020095024A1  
; GENERAL INFORMATION:  
; APPLICANT: MIKESSELL, GLEN E.  
; APPLICANT: CHANG, HAN  
; APPLICANT: FINGER, JOSHUA N.  
; APPLICANT: YANG, GUCHEN  
; APPLICANT: LU, PIN  
; APPLICANT: ZHOU, XIA-DI  
; APPLICANT: PEACH, ROBERT  
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
; FILE REFERENCE: 3053-4071US2  
; CURRENT APPLICATION NUMBER: US/09/875,338  
; CURRENT FILING DATE: 2001-06-06  
; PRIOR APPLICATION NUMBER: 60/272,107  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: 60/209,811  
; PRIOR FILING DATE: 2000-06-06  
; NUMBER OF SEQ ID NOS: 94  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 18  
; LENGTH: 666  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-875-338-18

Alignment Scores:  
Pred. No.: 3.51e-55 Length: 666  
Score: 527.00 Matches: 101  
Percent Similarity: 100.00% Conservative: 0  
Best Local Similarity: 100.00% Mismatches: 0  
Query Match: 34.888 Indels: 0  
DB: 10 Gaps: 0

US-09-649-108-1 (1-290) x US-09-875-338-18 (1-666)

QY 190 LeuPheasnValThrrSerThrrLeuArglleAsnThrrThrasnGluIlePheTyrCys 209  
DB 3 CTTTCAATGTGACACGACATGAGATCAACACAACTAATGATTTTCTACTGC 62  
QY 210 ThrrPheArgLysLeuAspProGluGluAsnHslThrrAlaGluLeuValIleProGluLeu 229  
DB 63 ACTTTTAGGAGATTAGATCTGAGAAACCAATACACACTGAATTTGGTCAATCCAGAACTA 122  
QY 230 ProLeuAlaHslProProAsnGluArgThrrHslLeuValIleLeuGlyAlaIleLeuLeu 249  
DB 123 CTTCTGGCAGATCTCTCCAAATGAAAGACATCTTGCTTAATTTGAGACCACTTTATTA 182  
QY 250 CysLeuGlyValAlaLeuThrrPheIlePheArgLeuArgLysGlyArgMetLeuAspVal 269  
DB 183 TGCCTTGTTGATACACTGACATTCATCTCCGTTTAGAAAGAGAGATGATGATGCTG 242  
QY 270 LysLysCysGlyIleGlnAspThrrAsnSerLysLysGlnSerAspThrrHslLeuGlu 289  
DB 243 AAAAAGTGGCATCCCAAGTACAACTCAAGAACCAAGTGTATACATTTGGAGAGAC 302  
QY 290 Thr 290  
DB 303 ACG 305

## RESULT 14

US-09-896-913A-3  
; Sequence 3, Application US/09896913A  
; Patent No. US20020164600A1  
; GENERAL INFORMATION:  
; APPLICANT: Freeman, Gordon  
; APPLICANT: Chernova, Irene  
; APPLICANT: Chernova, Tatiana  
; APPLICANT: Malenkovich, Nelly  
; APPLICANT: WOOD, CLIVE  
; TITLE OF INVENTION: PD-L2 MOLECULES: NOVEL PD-1 LIGANDS AND  
; FILE REFERENCE: GNN-026A  
; CURRENT APPLICATION NUMBER: US/09/896,913A  
; CURRENT FILING DATE: 2002-04-15  
; PRIOR APPLICATION NUMBER: 60/214,563  
; PRIOR FILING DATE: 2000-06-28  
; PRIOR APPLICATION NUMBER: 60/270,822  
; PRIOR FILING DATE: 2001-02-23  
; PRIOR APPLICATION NUMBER: 60/271,114  
; PRIOR FILING DATE: 2001-02-23  
; NUMBER OF SEQ ID NOS: 12  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 3  
; LENGTH: 819  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (1)...(819)  
US-09-896-913A-3

Alignment Scores:  
Pred. No.: 5.82e-41 Length: 819  
Score: 411.50 Matches: 106  
Percent Similarity: 53.14% Conservative: 38  
Best Local Similarity: 39.11% Mismatches: 93  
Query Match: 27.23% Indels: 34  
DB: 9 Gaps: 8

US-09-649-108-1 (1-290) x US-09-896-913A-3 (1-819)

QY 19 PheThrrValThrrValProLysAspLeuTyrValValGluIlyrGlySerAsnMetThrIle 38  
DB 61 TTCACAGTGAACGCTCCTTAAGAACTGTATATAGATGACATGACACAGCAGCCCTG 120  
QY 39 GluCysLysPheProValGluLysGlnLeuAspLeuAlaLeuIleValTyrTrpGlu 58  
DB 121 GAATGCAACTTTGACACTGGAAGTCAATGTGACACTTGGACCAATTAACAGCAGTTGCCAA 180



```

QY 59 MetGluAspLysAsnIleIleGlnPheValHisGlyGluGluAspLeuLysValGlnHis 78
DB 181 -----AAGGTGGAAT 192
QY 79 -----SerSerTyrArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuLysAsn 96
DB 193 GATACATCCCGACACCGGTGAAGAGCCACTTGTGCGAGGACGACCTGCCCTTAGGGAAG 252
QY 97 AlaAlaLeuGlnIleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIle 116
DB 253 GCGTCGTCCACATACCTCCAGTCAAGTGAAGGAGCAAGGACACTACCAATGCAATATC 312
QY 117 SerTyrGlyGlyAla-----AspTyrLysArgIleThrValLysValAsnAlaProTyrAsn 135
DB 313 ATCATATGGCGTCCCTGGAGCTACAGACTGACTGCAAGTCAAGCTTCTTACAGAG 372
QY 136 LysIleAsnGlnIleThrAspValLysLeuValAspProValThrSerGlnHisGlnLeuThrCys 155
DB 373 AAAATTAACACTCACATCTTAAAGGTT---CCAGAAACAGATGAGTAGAGTCACTGC 429
QY 156 GlnAlaGluGlyTyrProLysAlaGluValIleTyrThrSerSerAspHisGlnValLeu 175
DB 430 CAGGCTACAGGTTATCCCTCTGGCAGAACTATCTGCCAAC-----GTC 474
QY 176 SerGlyLysThrThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSer 195
DB 475 AGCGTTCCTGCCAACACACGACCTCCAGACCCCTGAAGGCTGTACAGGTCAACAGT 534
QY 196 ThrLeuArgIleAsnThrThrThrAsnGluIlePheTyrCysThrPheArgArgLeuAsp 215
DB 535 GTTCTGCGCCCTAAAGCCACCCCTGGCAGAAACTTCACTGTGTCTC-----582
QY 216 ProGluGlnAsnHisThrAlaGluLeuValIleProGluLeuProLeuAlaHisProPro 235
DB 583 ---TGGAACTACTCACGTCAGGGAAGCTTCTTGGCCAGCACTTGAACCTTCAAGTAGATG 639
QY 236 AsnGluArgThrHisLeuValIleLeuGlyAlaIleLeuLeu-----CysLeuGlyVal 253
DB 640 GAACCCAGAGCCATCCAACTTGGCTGCTCATATTTCAATCCCTCTGCATC---ATT 696
QY 254 AlaLeuThrPheIlePheArgLeuArgLysGlyArgMetMet-AspValLysLysCysGly 273
DB 697 GCTTTCATTTTCATAGCCACACAGTATAGCTTAAAGAAAACAACCTGTGCAAAAGCTGTAT 756
QY 273 YIleGlnAspThrAsnSerLysLysGlnSer 283
DB 757 TCTTCAAAAGACACAAAGAAAGACCTGTCA 787
RU 15
US-09-794-210-1
Sequence 1, Application US/09794210
Patent No. US20020091246A1
GENERAL INFORMATION:
APPLICANT: PARDOUL, Drew
APPLICANT: TSUCHIDA, Haruo
APPLICANT: GORSKI, Kevin
APPLICANT: TSENG, Su-Yi
TITLE OF INVENTION: NEW DENDRITIC CELL CO-STIMULATORY MOLECULES
FILE REFERENCE: 2240-169345
CURRENT APPLICATION NUMBER: US/09/794,210
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 819
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (1)..(819)
OTHER INFORMATION:
US-09-794-210-1

```

```

Alignment Scores:
Pred. No.: 5,82e-41 Length: 819
Score: 411.50 Matches: 106
Percent Similarity: 53.14% Conservative: 38
Best Local Similarity: 39.11% Mismatches: 93
Query Match: 27.23% Indels: 34
DB: 10 Gaps: 8

```

US-09-649-108-1 (1-290) x US-09-794-210-1 (1-819)

```

QY 19 PheThrValIleThrValProLysAspLeuTyrValValGluTyrGlySerAsnMetThrIle 38
DB 61 TTCACAGTACAGTCCCTAAGCACTGTCATTAAGAGACATGCGCAGCAATGTGACCTG 120
QY 39 GluCysLysPheProValGluLysGlnLeuAspAlaIleValIleValTyrArgLeu 58
DB 121 GAATCCACTTTGACACCTGGAAGTATGTGAACCTTGGAGCAATACAGCCAGTGTGCA 180
QY 59 MetGluAspLysAsnIleIleGlnPheValHisGlyGluGluAspLeuLysValGlnHis 78
DB 181 -----AAGGTGGAAT 192
QY 79 -----SerSerTyrArgGlnArgAlaArgLeuLeuLysAspGlnLeuSerLeuLysAsn 96
DB 193 GATACATCCCGACACCGGTGAAGAGCCACTTGTGCGAGGACGACCTGCCCTTAGGGAAG 252
QY 97 AlaAlaLeuGlnIleThrAspValLysLeuGlnAspAlaGlyValTyrArgCysMetIle 116
DB 253 GCGTCGTCCACATACCTCCAGTCAAGTGAAGGAGCAAGGACACTACCAATGCAATATC 312
QY 117 SerTyrGlyGlyAla-----AspTyrLysArgIleThrValLysValAsnAlaProTyrAsn 135
DB 313 ATCATATGGCGTCCCTGGAGCTACAGACTGACTGCAAGTCAAGCTTCTTACAGAG 372
QY 136 LysIleAsnGlnIleThrAspValLysLeuValAspProValThrSerGlnHisGlnLeuThrCys 155
DB 373 AAAATTAACACTCACATCTTAAAGGTT---CCAGAAACAGATGAGTAGAGTCACTGC 429
QY 156 GlnAlaGluGlyTyrProLysAlaGluValIleTyrThrSerSerAspHisGlnValLeu 175
DB 430 CAGGCTACAGGTTATCCCTCTGGCAGAACTATCTGCCAAC-----GTC 474
QY 176 SerGlyLysThrThrThrAsnSerLysArgGluGluLysLeuPheAsnValThrSer 195
DB 475 AGCGTTCCTGCCAACACACGACCTCCAGACCCCTGAAGGCTGTACAGGTCAACAGT 534
QY 196 ThrLeuArgIleAsnThrThrThrAsnGluIlePheTyrCysThrPheArgArgLeuAsp 215
DB 535 GTTCTGCGCCCTAAAGCCACCCCTGGCAGAAACTTCACTGTGTCTC-----582
QY 216 ProGluGlnAsnHisThrAlaGluLeuValIleProGluLeuProLeuAlaHisProPro 235
DB 583 ---TGGAACTACTCACGTCAGGGAAGCTTCTTGGCCAGCACTTGAACCTTCAAGTAGATG 639
QY 236 AsnGluArgThrHisLeuValIleLeuGlyAlaIleLeuLeu-----CysLeuGlyVal 253
DB 640 GAACCCAGAGCCATCCAACTTGGCTGCTCATATTTCAATCCCTCTGCATC---ATT 696
QY 254 AlaLeuThrPheIlePheArgLeuArgLysGlyArgMetMet-AspValLysLysCysGly 273
DB 697 GCTTTCATTTTCATAGCCACACAGTATAGCTTAAAGAAAACAACCTGTGCAAAAGCTGTAT 756
QY 273 YIleGlnAspThrAsnSerLysLysGlnSer 283
DB 757 TCTTCAAAAGACACAAAGAAAGACCTGTCA 787

```

Search completed: January 12, 2003, 12:44:57  
Job time : 68 secs



GenCore version 5.1.3  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: January 12, 2003, 10:10:43 ; Search time 10.5287 Seconds  
(without alignments)  
480,942 Million cell updates/sec

Title: US-09-649-108-1\_COPY\_30\_290  
Perfect score: 1356  
Sequence: 1 VEGSNMTICKFPVEKQD.....KCGIDPTNSKOSDTHLEET 261

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 118974 seqs, 19401057 residues

Minimum DB seq length: 0  
Maximum DB seq length: 200000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications\_AA.\*  
1: /cgn2\_6/ptodata/2/pubpaa/US08\_NEW\_PUB.pep.\*  
2: /cgn2\_6/ptodata/2/pubpaa/PCR\_NEW\_PUB.pep.\*  
3: /cgn2\_6/ptodata/2/pubpaa/US06\_NEW\_PUB.pep.\*  
4: /cgn2\_6/ptodata/2/pubpaa/US06\_PUBCOMB.pep.\*  
5: /cgn2\_6/ptodata/2/pubpaa/US07\_NEW\_PUB.pep.\*  
6: /cgn2\_6/ptodata/2/pubpaa/US07\_PUBCOMB.pep.\*  
7: /cgn2\_6/ptodata/2/pubpaa/PCR\_US\_PUBCOMB.pep.\*  
8: /cgn2\_6/ptodata/2/pubpaa/US08\_PUBCOMB.pep.\*  
9: /cgn2\_6/ptodata/2/pubpaa/US09\_NEW\_PUB.pep.\*  
10: /cgn2\_6/ptodata/2/pubpaa/US09\_PUBCOMB.pep.\*  
11: /cgn2\_6/ptodata/2/pubpaa/US10\_NEW\_PUB.pep.\*  
12: /cgn2\_6/ptodata/2/pubpaa/US10\_PUBCOMB.pep.\*  
13: /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep.\*  
14: /cgn2\_6/ptodata/2/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1356	100.0	290	9	US-10-068-215-4
2	1356	100.0	290	9	US-09-896-738-12
3	1356	100.0	290	9	US-09-896-913A-12
4	1356	100.0	290	9	US-09-915-789A-17
5	1356	100.0	290	10	US-09-796-858-42
6	1356	100.0	290	10	US-09-875-338-2
7	1356	100.0	290	10	US-09-910-174A-8
8	1356	100.0	290	10	US-09-955-866-6
9	1356	100.0	290	10	US-09-895-837-12
10	1356	100.0	290	12	US-10-002-775-4
11	1104	81.4	220	9	US-09-915-789A-23
12	1096	80.8	480	10	US-09-875-338-5
13	1029	75.9	245	9	US-10-068-215-2
14	1029	75.9	245	12	US-10-002-775-2
15	952	70.2	290	9	US-10-068-215-23
16	952	70.2	290	9	US-09-896-913A-11
17	952	70.2	290	10	US-09-794-210-16
18	952	70.2	290	10	US-09-910-174A-32
19	952	70.2	290	10	US-09-895-837-11

20	952	70.2	290	12	US-10-002-775-11	Sequence 11, Appl
21	796.5	58.7	279	10	US-09-796-858-44	Sequence 44, Appl
22	352	26.0	254	10	US-09-955-866-3	Sequence 3, Appl
23	352	26.0	273	9	US-09-896-913A-2	Sequence 2, Appl
24	352	26.0	273	10	US-09-794-210-2	Sequence 2, Appl
25	352	26.0	273	10	US-09-875-338-15	Sequence 15, Appl
26	352	26.0	273	10	US-09-910-174A-2	Sequence 2, Appl
27	352	26.0	273	10	US-09-955-866-2	Sequence 2, Appl
28	352	26.0	273	10	US-09-895-837-12	Sequence 17, Appl
29	329	24.3	451	10	US-09-875-338-17	Sequence 5, Appl
30	301	22.2	247	9	US-09-896-913A-5	Sequence 48, Appl
31	301	22.2	247	10	US-09-796-858-48	Sequence 4, Appl
32	301	22.2	247	10	US-09-794-210-4	Sequence 31, Appl
33	301	22.2	247	10	US-09-910-174A-31	Sequence 11, Appl
34	301	22.2	247	10	US-09-895-837-5	Sequence 11, Appl
35	292	21.5	316	10	US-09-875-338-11	Sequence 7, Appl
36	292	21.5	316	10	US-09-875-338-7	Sequence 13, Appl
37	289.5	21.3	316	9	US-09-978-295A-137	Sequence 137, Appl
38	289	21.3	316	9	US-09-896-738-14	Sequence 14, Appl
39	289	21.3	316	9	US-09-978-697-137	Sequence 137, Appl
40	289	21.3	316	9	US-09-978-192A-137	Sequence 137, Appl
41	289	21.3	316	9	US-09-999-832A-137	Sequence 4, Appl
42	289	21.3	316	9	US-09-790-622-4	Sequence 137, Appl
43	289	21.3	316	9	US-09-978-189-137	Sequence 135, Appl
44	289	21.3	316	10	US-09-789-561-135	
45	289	21.3	316	10	US-09-789-561-135	

## ALIGNMENTS

RESULT 1	US-10-068-215-4	Sequence 4, Application US/10068215
1	Patent No. US2002016000A1	GENERAL INFORMATION:
2	APPLICANT: Clive Wood	APPLICANT: Gordon Freeman
3	TITLE OF INVENTION: PD-1, A Receptor For B7-4, and Uses Therefor	FILE REFERENCE: GNN-004B
4	CURRENT APPLICATION NUMBER: US/10/068,215	CURRENT FILING DATE: 2002-02-06
5	PRIOR APPLICATION NUMBER: 09/645,069	PRIOR FILING DATE: 2000-08-23
6	PRIOR APPLICATION NUMBER: 60/150,390	PRIOR FILING DATE: 1999-8-23
7	PRIOR APPLICATION NUMBER: 60/164,897	PRIOR FILING DATE: 1999-11-10
8	NUMBER OF SEQ ID NOS: 23	SOFTWARE: PatentIn Ver. 2.0
9	SEQ ID NO 4	LENGTH: 290
10	TYPE: PRT	ORGANISM: Homo sapiens
11	US-10-068-215-4	Query Match
12	Best Local Similarity	100.0%; Score 1356; DB 9; Length 290;
13	Matches 261; Conservative	0; Mismatches 0; Indels 0; Gaps 0;

QY	1	VEGSGNMTICKFPVEKQD.....KCGIDPTNSKOSDTHLEET 261	Sequence 11, Appl
DB	30	VEGSGNMTICKFPVEKQD.....KCGIDPTNSKOSDTHLEET 261	Sequence 44, Appl
QY	61	DQSLGNAALQITDVKLODAGYRCMISYGCADYKRTTVVNA.PYKINORILVDPVTS 120	Sequence 2, Appl
DB	90	DQSLGNAALQITDVKLODAGYRCMISYGCADYKRTTVVNA.PYKINORILVDPVTS 149	Sequence 15, Appl
QY	121	EHELTQCAEGYPAEVIWTSDDHVLGSKTPTTNSKREKLFVNTSTLRINTTNEIFYC 180	Sequence 2, Appl
DB	150	EHELTQCAEGYPAEVIWTSDDHVLGSKTPTTNSKREKLFVNTSTLRINTTNEIFYC 209	Sequence 17, Appl
QY	181	TFRRLDPEENHTALVLPPLAHPNPKRTHVILGAILLCLGVALTFIRLKRGMADV 240	Sequence 137, Appl

```
Db 210 TFRRLDPEENHTELVIPELPLAHPNERHVLIGAILLCLGVALTFIRLKRGRAMDY 269
OY 241 KKGCIODTNSKKOSDTHLEET 261
Db 270 KKGCIODTNSKKOSDTHLEET 290

RESULT 2
US-09-896-738-12
; Sequence 12, Application US/09896738
; Patent No. US20020165347A1
; GENERAL INFORMATION:
; APPLICANT: Fox, Michael
; APPLICANT: Sullivan, John K.
; APPLICANT: Pang, Mei
; TITLE OF INVENTION: B7-Like Molecules and Uses Thereof
; FILE REFERENCE: 00-513-A
; CURRENT APPLICATION NUMBER: US/09/896,738
; PARENT FILING DATE: 2001-06-29
; FOR APPLICATION NUMBER: 60/215,645
; PRIOR FILING DATE: 2000-06-30
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-896-738-12

Query Match 100.0%; Score 1356; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VEGSNMTIECKRPFVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRQARLLK 60
Db 30 VEGSNMTIECKRPFVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRQARLLK 89
OY 61 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVKNAPYKNINRILVDPVTS 120
Db 90 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVKNAPYKNINRILVDPVTS 149
OY 121 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
OY 181 TFRRLDPEENHTELVIPELPLAHPNERHVLIGAILLCLGVALTFIRLKRGRAMDY 240
Db 210 TFRRLDPEENHTELVIPELPLAHPNERHVLIGAILLCLGVALTFIRLKRGRAMDY 269
OY 241 KKGCIODTNSKKOSDTHLEET 261
Db 270 KKGCIODTNSKKOSDTHLEET 290

RESULT 3
US-09-896-913A-12
; Sequence 12, Application US/09896913A
; Patent No. US20020164600A1
; GENERAL INFORMATION:
; APPLICANT: Freeman, Gordon
; APPLICANT: Chernova, Irene
; APPLICANT: Malenkovich, Nelly
; APPLICANT: Wood, Clive
; TITLE OF INVENTION: PD-12 MOLECULES: NOVEL PD-1 LIGANDS AND
; FILE REFERENCE: GNN-026A
; CURRENT APPLICATION NUMBER: US/09/896,913A
; PARENT FILING DATE: 2002-04-15
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: 60/214,563
; PRIOR APPLICATION NUMBER: 60/270,822
```

```
; PRIOR FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 60/271,114
; PRIOR FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-896-913A-12

Query Match 100.0%; Score 1356; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VEGSNMTIECKRPFVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRQARLLK 60
Db 30 VEGSNMTIECKRPFVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRQARLLK 89
OY 61 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVKNAPYKNINRILVDPVTS 120
Db 90 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVKNAPYKNINRILVDPVTS 149
OY 121 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
OY 181 TFRRLDPEENHTELVIPELPLAHPNERHVLIGAILLCLGVALTFIRLKRGRAMDY 240
Db 210 TFRRLDPEENHTELVIPELPLAHPNERHVLIGAILLCLGVALTFIRLKRGRAMDY 269
OY 241 KKGCIODTNSKKOSDTHLEET 261
Db 270 KKGCIODTNSKKOSDTHLEET 290

RESULT 4
US-09-915-789A-17
; Sequence 17, Application US/09915789A
; Patent No. US20020168762A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Lieping
; TITLE OF INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY
; FILE REFERENCE: 07039-219001
; CURRENT APPLICATION NUMBER: US/09/915,789A
; PARENT FILING DATE: 2002-06-04
; PRIOR APPLICATION NUMBER: US 60/220,991
; PRIOR FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-915-789A-17

Query Match 100.0%; Score 1356; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VEGSNMTIECKRPFVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRQARLLK 60
Db 30 VEGSNMTIECKRPFVEKQDLALIIYWMEDKNIIOFVHGEEEDLKVOHSSYRQARLLK 89
OY 61 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVKNAPYKNINRILVDPVTS 120
Db 90 DQSLGNAALQITDVKLODAGYRCMISYGADYKRITVKNAPYKNINRILVDPVTS 149
OY 121 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTQAEQYKAEVYIWTSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
```

QY	181	TFRRLDPEENTAEVIELPLAPPNERTVLIGLILCTGALFEFRLKGRMDV	240
Db	210	TFRRLDPEENTAEVIELPLAPPNERTVLIGLILCTGALFEFRLKGRMDV	269
QY	241	KKGGDDPNSSKKOSDTHLEET	261
Db	270	KKGGDDPNSSKKOSDTHLEET	290

RESULT 5

```

US-09-796-858-42
: Sequence 42, Application US/09796858
: Patent No. US20020055139A1
:
: GENERAL INFORMATION:
: APPLICANT: Holtzmann, Douglas
: TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC,
: FILE REFERENCE: 7853-226-999
: CURRENT APPLICATION NUMBER: US/09/796,858
: CURRENT FILING DATE: 2001-03-01
: PRIOR APPLICATION NUMBER: 09/223,094
: PRIOR FILING DATE: 1998-12-30
: PRIOR APPLICATION NUMBER: 09/223,546
: PRIOR FILING DATE: 1998-12-30
: PRIOR APPLICATION NUMBER: 09/224,246
: PRIOR FILING DATE: 1998-12-30
: PRIOR APPLICATION NUMBER: 09/312,359
: PRIOR FILING DATE: 1999-05-14
: PRIOR APPLICATION NUMBER: 09/336,536
: PRIOR FILING DATE: 1999-06-18
: PRIOR APPLICATION NUMBER: 09/342,687
: PRIOR FILING DATE: 1999-06-29
: PRIOR APPLICATION NUMBER: 09/399,723
: PRIOR FILING DATE: 1999-09-20
: PRIOR APPLICATION NUMBER: 09/471,179
: PRIOR FILING DATE: 1999-12-23
: PRIOR APPLICATION NUMBER: 09/474,071
: PRIOR FILING DATE: 1999-12-29
: PRIOR APPLICATION NUMBER: 09/474,072
: PRIOR FILING DATE: 1999-12-29
: PRIOR APPLICATION NUMBER: 09/572,002
: PRIOR FILING DATE: 2000-05-14
: PRIOR APPLICATION NUMBER: 09/597,993
: PRIOR FILING DATE: 2000-06-12
: PRIOR APPLICATION NUMBER: 09/599,596
: PRIOR FILING DATE: 2000-06-22
: PRIOR APPLICATION NUMBER: 09/606,565
: PRIOR FILING DATE: 2000-06-29
: PRIOR APPLICATION NUMBER: 09/365,164
: PRIOR FILING DATE: 1999-07-30
: PRIOR APPLICATION NUMBER: 09/630,334
: PRIOR FILING DATE: 2000-07-31
: PRIOR APPLICATION NUMBER: 09/665,666
: PRIOR FILING DATE: 2000-09-20
: NUMBER OF SEQ ID NOS: 50
: SEQ ID NO 42
: LENGTH: 290
: TYPE: PRT
: ORGANISM: Homo sapiens
: US-09-796-858-42

```

Query Match	100.0%	Score 1356	DB 10	Length 290
Best Local Similarity	100.0%	Pred. No. 1e-94		
Matches 261	Conservative 0	Mismatches 0	Indels 0	Gaps 0
QY	1	VEYSNMITECKFPVEKOLDLAALIVYEMEDKNITIOFHGEDEDLKVQHSYRORARLLK	60	
Db	30	VEYSNMITECKFPVEKOLDLAALIVYEMEDKNITIOFHGEDEDLKVQHSYRORARLLK	89	
QY	61	DOLSLGNAALDITDVKLODAGYRCMISYGADYKRITPVKVAAPNKINQRLVADPVS	120	
Db	90	DOLSLGNAALDITDVKLODAGYRCMISYGADYKRITPVKVAAPNKINQRLVADPVS	149	

Qy	121	EHELTCQAEIGPKRAEIVMTSSDHVYLSGKTTTNSKKEEKLFWNTSLRINTTNEIFYC	180
Db	150	EHELTCQAEIGPKRAEIVMTSSDHVYLSGKTTTNSKKEEKLFWNTSLRINTTNEIFYC	209
Qy	181	TFRRIDPEENNTALVLPPELPLAPRNERTHVILGAILTCLGVALTFIRLKGKRMVY	240
Db	210	TFRRIDPEENNTALVLPPELPLAPRNERTHVILGAILTCLGVALTFIRLKGKRMVY	289
Qy	241	KKCGIDPTNSKKQSDTHLEET	261
Db	270	KKCGIDPTNSKKQSDTHLEET	290

RESULT 6  
TC-00-97

US-09-875-338-2  
Sequence 2, Application US/09875338  
Patent No. US20020095024A1  
GENERAL INFORMATION:  
APPLICANT: MIKESSELL, GLEN E.  
APPLICANT: CHANG, HAN  
APPLICANT: FINGER, JOSHUA N.  
APPLICANT: YANG, GUOCHEN  
APPLICANT: LU, PIN  
APPLICANT: ZHOU, XIA-DI  
APPLICANT: PEACH, ROBERT  
TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
TITLE OF INVENTION: IMMUNOMODULATION  
FILE REFERENCE: 3053-4071US2  
CURRENT APPLICATION NUMBER: US/09/875,338  
CURRENT FILING DATE: 2001-06-06  
PRIOR APPLICATION NUMBER: 60/272,107  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: 60/209,811  
PRIOR FILING DATE: 2000-06-06  
NUMBER OF SEQ ID NOS: 94  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 2  
LENGTH: 290  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-875-338-2

Query Match	100.0%	Score 1356;	DB 10;	Length 290;
Best Local Similarity	100.0%	Pred. NO. 1e-94;		
Matches 261;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	VEGSGNMITECKFPPEKODLALALIVWEMEDKNIIQVHGSEEDLKVOHSSYRORARLLK	60	
Db	30	VEGSGNMITECKFPPEKODLALALIVWEMEDKNIIQVHGSEEDLKVOHSSYRORARLLK	89	
QY	61	DQLSGNALQITDVKLDADAGYYRCMISYGADYKRITVKNAPYNNKINQRLVVDPVTS	120	
Db	90	DQLSGNALQITDVKLDADAGYYRCMISYGADYKRITVKNAPYNNKINQRLVVDPVTS	149	
QY	121	EHELTQCAEGYPKPAEVIWTTSSDHOVLSCKTTTTSNKREKLEFNVTSLRINTTTNEIFYC	180	
Db	150	EHELTQCAEGYPKPAEVIWTTSSDHOVLSCKTTTTSNKREKLEFNVTSLRINTTTNEIFYC	209	
QY	181	TFRRIDPEENNTAEIVTIDELPLAHPPNERTHLYIGAILLCGVALTFEFLRKGRMDV	240	
Db	210	TFRRIDPEENNTAEIVTIDELPLAHPPNERTHLYIGAILLCGVALTFEFLRKGRMDV	269	
QY	241	KKCGIODTNSKKOSDTHLEET	261	
Db	270	KKCGIODTNSKKOSDTHLEET	290	

## RESULT 7

US-09-910-174A-8  
; Sequence 8, Application US/09910174A  
; Patent NO. US20020106730A1  
; GENERAL INFORMATION:  
; APPLICANT: Coyle, Anthony J.

```

: APPLICANT: Fraser, Christopher C.
: TITLE OF INVENTION: B7-H2 Molecules, No. US20020106730A1 Members of the B7
: FILE OF INVENTION: Family and Uses Thereof
: FILE REFERENCE: 35800/236924
: CURRENT APPLICATION NUMBER: US/09/910,174A
: PRIOR FILING DATE: 2001-07-20
: PRIOR APPLICATION NUMBER: US 09/620,461
: NUMBER OF SEQ ID NOS: 32
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 8
: LENGTH: 290
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-910-174A-8
```

```

Query Match          100.0%; Score 1356; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

QY 1 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 60
   |||||||
DB 30 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 89
   |||||||
QY 61 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKYNAPYKINQRIILVDPVTS 120
   |||||||
DB 90 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKYNAPYKINQRIILVDPVTS 149
   |||||||
QY 121 EHELTQAEYGPRAEVIWTSDDHVLGKTTTNSKREKLFNTSTLRITNTTNEIFYC 180
   |||||||
DB 150 EHELTQAEYGPRAEVIWTSDDHVLGKTTTNSKREKLFNTSTLRITNTTNEIFYC 209
   |||||||
QY 181 TFRRLDEENHTAEVLVPELPLAHPNERTHLVILGAILLCLGVALTFIFRLRGKRMADV 240
   |||||||
DB 210 TFRRLDEENHTAEVLVPELPLAHPNERTHLVILGAILLCLGVALTFIFRLRGKRMADV 269
   |||||||
QY 241 KCGIOTNSKKOSDTHLEET 261
   |||||||
DB 270 KCGIOTNSKKOSDTHLEET 290
   |||||||
```

```

RESULT 8
US-09-955-866-6
: Sequence 6, Application US/09955866
: Patent No. US20020107363A1
: GENERAL INFORMATION:
: APPLICANT: Fox, Michael
: APPLICANT: Sullivan, John K.
: APPLICANT: Holst, Paige
: APPLICANT: Yoshinaga, Steven Kiyoshi
: TITLE OF INVENTION: B7-Like Polypeptides and Uses Thereof
: FILE REFERENCE: 00/759-A
: CURRENT APPLICATION NUMBER: US/09/955,866
: PRIOR FILING DATE: 2001-09-19
: PRIOR APPLICATION NUMBER: 60/233,867
: NUMBER OF SEQ ID NOS: 30
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 6
: LENGTH: 290
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-955-866-6
```

```

Query Match          100.0%; Score 1356; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

QY 1 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 60
   |||||||
DB 30 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 89
   |||||||
```

```

QY 61 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKYNAPYKINQRIILVDPVTS 120
   |||||||
DB 90 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKYNAPYKINQRIILVDPVTS 149
   |||||||
QY 121 EHELTQAEYGPRAEVIWTSDDHVLGKTTTNSKREKLFNTSTLRITNTTNEIFYC 180
   |||||||
DB 150 EHELTQAEYGPRAEVIWTSDDHVLGKTTTNSKREKLFNTSTLRITNTTNEIFYC 209
   |||||||
QY 181 TFRRLDEENHTAEVLVPELPLAHPNERTHLVILGAILLCLGVALTFIFRLRGKRMADV 240
   |||||||
DB 210 TFRRLDEENHTAEVLVPELPLAHPNERTHLVILGAILLCLGVALTFIFRLRGKRMADV 269
   |||||||
QY 241 KCGIOTNSKKOSDTHLEET 261
   |||||||
DB 270 KCGIOTNSKKOSDTHLEET 290
   |||||||
```

```

RESULT 9
US-09-895-837-12
: Sequence 12, Application US/09895837
: Patent No. US20020110836A1
: GENERAL INFORMATION:
: APPLICANT: Freeman, Gordon
: APPLICANT: Chernova, Iryana
: APPLICANT: Malenkovich, Nelly
: APPLICANT: Wood, Clive
: APPLICANT: Latchman, Yvette
: APPLICANT: Sharpe, Arlene H.
: TITLE OF INVENTION: PD-12 MOLECULES: NOVEL PD-1 LIGANDS AND
: FILE REFERENCE: GNN-026B
: CURRENT APPLICATION NUMBER: US/09/895,837
: PRIOR FILING DATE: 2001-06-28
: PRIOR APPLICATION NUMBER: 60/214,563
: PRIOR FILING DATE: 2000-06-28
: PRIOR APPLICATION NUMBER: 60/270,822
: PRIOR FILING DATE: 2001-02-23
: PRIOR APPLICATION NUMBER: 60/271,114
: NUMBER OF SEQ ID NOS: 12
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 12
: LENGTH: 290
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-895-837-12
```

```

Query Match          100.0%; Score 1356; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

QY 1 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 60
   |||||||
DB 30 VEGSNMTIECKPFVEKQDLALIVYWMEDKNIIQFVHGEEEDLKVOHSSYRORARLLK 89
   |||||||
QY 61 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKYNAPYKINQRIILVDPVTS 120
   |||||||
DB 90 DQSLGNAALQITDVKLQDAGVRCMISYGADYKRITVKYNAPYKINQRIILVDPVTS 149
   |||||||
QY 121 EHELTQAEYGPRAEVIWTSDDHVLGKTTTNSKREKLFNTSTLRITNTTNEIFYC 180
   |||||||
DB 150 EHELTQAEYGPRAEVIWTSDDHVLGKTTTNSKREKLFNTSTLRITNTTNEIFYC 209
   |||||||
QY 181 TFRRLDEENHTAEVLVPELPLAHPNERTHLVILGAILLCLGVALTFIFRLRGKRMADV 240
   |||||||
DB 210 TFRRLDEENHTAEVLVPELPLAHPNERTHLVILGAILLCLGVALTFIFRLRGKRMADV 269
   |||||||
QY 241 KCGIOTNSKKOSDTHLEET 261
   |||||||
DB 270 KCGIOTNSKKOSDTHLEET 290
   |||||||
```

```
RESULT 10
US-10-002-775-4
; Sequence 4, Application US/10002775
; Patent No. US20020102651A1
; GENERAL INFORMATION:
; APPLICANT: Gordon Freeman
; APPLICANT: Vassiliki Bousiotis
; APPLICANT: Tatyana Chernova
; APPLICANT: Nelly Malenkovich
; TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR
; FILE REFERENCE: GNN-004ADV
; CURRENT APPLICATION NUMBER: US/10/002.775
; PRIOR FILING DATE: 2001-11-02
; PRIOR APPLICATION NUMBER: US 09/644,934
; PRIOR FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: 60/150,390
; PRIOR FILING DATE: 1999-08-23
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-002-775-4

Query Match          100.0%; Score 1356; DB 12; Length 290;
Best Local Similarity 100.0%; Pred. No. 1e-94;
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKPFVEKQDLALIVYWEKDKNIQFVHGEEEDLVKQHSYRORARLTK 60
DB 30 VEGSNMTIECKPFVEKQDLALIVYWEKDKNIQFVHGEEEDLVKQHSYRORARLTK 89
QY 61 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKVNAPYNNINORILVVDVPTS 120
DB 90 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKVNAPYNNINORILVVDVPTS 149
QY 121 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
DB 150 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
QY 181 TFRRLDPEENHTAEVLVPELPLAHPNERTHVLVILGAILLCLGVALFTFRLKGRAMDV 240
DB 210 TFRRLDPEENHTAEVLVPELPLAHPNERTHVLVILGAILLCLGVALFTFRLKGRAMDV 269
QY 241 KKCGIDTNSKKOSDPTLEET 261
DB 270 KKCGIDTNSKKOSDPTLEET 290

RESULT 11
US-09-915-789A-23
; Sequence 23, Application US/09915789A
; Patent No. US20020168762A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Lieping
; APPLICANT: Tatyana Chernova
; TITLE OF INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY
; FILE REFERENCE: 07039-219001
; CURRENT APPLICATION NUMBER: US/09/915,789A
; CURRENT FILING DATE: 2002-06-04
; PRIOR APPLICATION NUMBER: US 60/220,991
; PRIOR FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 23
; LENGTH: 220
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-915-789A-23

Query Match          81.4%; Score 1104; DB 9; Length 220;
Best Local Similarity 100.0%; Pred. No. 5.4e-76;
```

```
Matches 211; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKPFVEKQDLALIVYWEKDKNIQFVHGEEEDLVKQHSYRORARLTK 60
DB 10 VEGSNMTIECKPFVEKQDLALIVYWEKDKNIQFVHGEEEDLVKQHSYRORARLTK 69
QY 61 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKVNAPYNNINORILVVDVPTS 120
DB 70 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKVNAPYNNINORILVVDVPTS 129
QY 121 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
DB 130 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 189
QY 181 TFRRLDPEENHTAEVLVPELPLAHPNERTH 211
DB 190 TFRRLDPEENHTAEVLVPELPLAHPNERTH 220

RESULT 12
US-09-875-338-5
; Sequence 5, Application US/09875338
; Patent No. US20020095024A1
; GENERAL INFORMATION:
; APPLICANT: MIKESSELL, GLEN E.
; APPLICANT: CHANG, HAN
; APPLICANT: FINGER, JOSHUA N.
; APPLICANT: YANG, GUCHEN
; APPLICANT: LU, PIN
; APPLICANT: ZHOU, XIA-DI
; APPLICANT: PEACH, ROBERT
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
; FILE REFERENCE: 3053-4071US2
; CURRENT APPLICATION NUMBER: US/09/875,338
; CURRENT FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/272,107
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: 60/209,811
; PRIOR FILING DATE: 2000-06-06
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 480
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-875-338-5

Query Match          80.8%; Score 1096; DB 10; Length 480;
Best Local Similarity 100.0%; Pred. No. 5.4e-75;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKPFVEKQDLALIVYWEKDKNIQFVHGEEEDLVKQHSYRORARLTK 60
DB 34 VEGSNMTIECKPFVEKQDLALIVYWEKDKNIQFVHGEEEDLVKQHSYRORARLTK 93
QY 61 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKVNAPYNNINORILVVDVPTS 120
DB 94 DQSLGNAALQITDVKLQDAGVYRCMISYGADYKRTIVKVNAPYNNINORILVVDVPTS 153
QY 121 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
DB 154 EHELTQCAEGYPAKAEVITWSSDHQVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 213
QY 181 TFRRLDPEENHTAEVLVPELPLAHPNERT 210
DB 214 TFRRLDPEENHTAEVLVPELPLAHPNERT 243

RESULT 13
```

Query Match	75.98;	Score 1029;	DB 12;	Length 245;
Best Local Similarity	100.0%;	Pred. No. 2.5e-70;		
Matches 198;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;

Search completed: January 12, 2003, 10:19:07  
Job time : 11.5287 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2003 Comugen Ltd.

OM protein - protein search, using sw model

Run on: January 12, 2003, 10:10:43 ; Search time 8.47134 Seconds  
(without alignments)  
480.942 Million cell updates/sec

Title: US-09-649-108-10  
Perfect score: 1096  
Sequence: 1 VEGSNMTIECKFPEVKOLD.....HTAELVPELPLAPPNERT 210

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 118974 seqs, 19401057 residues

Number of hits satisfying chosen parameters: 118974

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

Published\_Applications\_AA:\*  
1: /cgn2\_6/ptodata/2/pubppa/US08\_NEW\_PUB.pep:\*  
2: /cgn2\_6/ptodata/2/pubppa/PCPT\_NEW\_PUB.pep:\*  
3: /cgn2\_6/ptodata/2/pubppa/US06\_NEW\_PUB.pep:\*  
4: /cgn2\_6/ptodata/2/pubppa/US07\_NEW\_PUB.pep:\*  
5: /cgn2\_6/ptodata/2/pubppa/US07\_PUBCOMB.pep:\*  
6: /cgn2\_6/ptodata/2/pubppa/PCPTUS\_PUBCOMB.pep:\*  
7: /cgn2\_6/ptodata/2/pubppa/PCPTUS\_PUBCOMB.pep:\*  
8: /cgn2\_6/ptodata/2/pubppa/US08\_PUBCOMB.pep:\*  
9: /cgn2\_6/ptodata/2/pubppa/US09\_NEW\_PUB.pep:\*  
10: /cgn2\_6/ptodata/2/pubppa/US09\_PUBCOMB.pep:\*  
11: /cgn2\_6/ptodata/2/pubppa/US10\_NEW\_PUB.pep:\*  
12: /cgn2\_6/ptodata/2/pubppa/US10\_PUBCOMB.pep:\*  
13: /cgn2\_6/ptodata/2/pubppa/US60\_NEW\_PUB.pep:\*  
14: /cgn2\_6/ptodata/2/pubppa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	1096	100.0	220	9	US-09-915-789A-23
2	1096	100.0	290	9	US-10-068-215-4
3	1096	100.0	290	9	US-09-896-738-12
4	1096	100.0	290	9	US-09-896-913A-12
5	1096	100.0	290	9	US-09-915-789A-17
6	1096	100.0	290	10	US-09-796-858-42
7	1096	100.0	290	10	US-09-875-338-2
8	1096	100.0	290	10	US-09-910-174A-8
9	1096	100.0	290	10	US-09-955-866-6
10	1096	100.0	290	10	US-09-895-837-12
11	1096	100.0	290	12	US-10-002-775-4
12	1096	100.0	480	10	US-09-875-338-5
13	1029	93.9	245	9	US-10-068-215-2
14	1029	93.9	245	12	US-10-002-775-2
15	815.5	74.4	290	9	US-10-068-215-23
16	815.5	74.4	290	9	US-09-896-913A-11
17	815.5	74.4	290	10	US-09-794-210-16
18	815.5	74.4	290	10	US-09-910-174A-32
19	815.5	74.4	290	10	US-09-895-837-11

20	815.5	74.4	290	12	US-10-002-775-11	Sequence 11, Appl
21	697	63.6	279	10	US-09-796-858-44	Sequence 44, Appl
22	336	30.7	254	10	US-09-955-866-3	Sequence 3, Appl1
23	336	30.7	273	9	US-09-896-913A-2	Sequence 2, Appl1
24	336	30.7	273	10	US-09-794-210-2	Sequence 2, Appl1
25	336	30.7	273	10	US-09-875-338-15	Sequence 15, Appl1
26	336	30.7	273	10	US-09-910-174A-2	Sequence 2, Appl1
27	336	30.7	273	10	US-09-955-866-2	Sequence 2, Appl1
28	336	30.7	273	10	US-09-895-837-2	Sequence 2, Appl1
29	329	30.0	451	10	US-09-875-338-17	Sequence 17, Appl
30	289.5	26.4	247	9	US-09-896-913A-5	Sequence 5, Appl1
31	289.5	26.4	247	10	US-09-796-858-48	Sequence 48, Appl
32	289.5	26.4	247	10	US-09-794-210-4	Sequence 4, Appl1
33	289.5	26.4	247	10	US-09-910-174A-31	Sequence 31, Appl
34	289.5	26.4	247	10	US-09-895-837-5	Sequence 5, Appl1
35	285.5	24.2	316	10	US-09-875-338-11	Sequence 11, Appl1
36	265.5	24.2	534	10	US-09-875-338-7	Sequence 7, Appl1
37	265.5	24.2	698	10	US-09-875-338-9	Sequence 9, Appl1
38	262.5	24.0	316	9	US-09-978-295A-137	Sequence 137, Appl
39	262.5	24.0	316	9	US-09-896-738-14	Sequence 14, Appl
40	262.5	24.0	316	9	US-09-978-697-137	Sequence 137, Appl
41	262.5	24.0	316	9	US-09-978-192A-137	Sequence 137, Appl
42	262.5	24.0	316	9	US-09-999-832A-137	Sequence 137, Appl
43	262.5	24.0	316	9	US-09-790-622-4	Sequence 4, Appl1
44	262.5	24.0	316	9	US-09-978-189-137	Sequence 137, Appl
45	262.5	24.0	316	10	US-09-789-561-135	Sequence 135, Appl

#### ALIGNMENTS

RESULT 1  
US-09-915-789A-23  
Sequence 23, Application US/09915789A  
Patent No. US20020168762A1  
GENERAL INFORMATION:  
APPLICANT: Chen, Lieping  
TITLE OR INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY  
FILE REFERENCE: 07039-219001  
CURRENT APPLICATION NUMBER: US/09/915, 789A  
CURRENT FILING DATE: 2002-06-04  
PRIOR APPLICATION NUMBER: US 60/220,991  
PRIOR FILING DATE: 2000-07-27  
NUMBER OF SEQ ID NOS: 23  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 23  
LENGTH: 220  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-915-789A-23

Query Match 100.0%; Score 1096; DB 9; Length 220;  
Best Local Similarity 100.0%; Pred. No. 2, 2e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0;

QY	1	VEGSSNMTECKFPEVKOLDLAALIVYEMEDKNIOFVHGEEDLKVOHSSYRORARLLK	60
DB	10	VEGSSNMTECKFPEVKOLDLAALIVYEMEDKNIOFVHGEEDLKVOHSSYRORARLLK	69
QY	61	DQSLGNALDITVKKLDDAIVYRCMISYGADVKRITVKNAPYKINQRLVYDPTS	120
DB	70	DQSLGNALDITVKKLDDAIVYRCMISYGADVKRITVKNAPYKINQRLVYDPTS	129
QY	121	EHELTCAEGYPKAEVITSSDHOVLGKTTTNSKREKLFNVTSLRINTTNEIPLYC	180
DB	130	EHELTCAEGYPKAEVITSSDHOVLGKTTTNSKREKLFNVTSLRINTTNEIPLYC	189
QY	181	TFRRLDPEENHTAEVLPELPLAPPNERT	210
DB	190	TFRRLDPEENHTAEVLPELPLAPPNERT	219

```
RESULT 2
US-10-068-215-4
; Sequence 4, Application US/10068215
; Patent No. US2002016000A1
; GENERAL INFORMATION:
; APPLICANT: Clive Mood
; APPLICANT: Gordon Freeman
; TITLE OF INVENTION: PD-1, A Receptor For B7-4, and Uses Therefor
; FILE REFERENCE: GNN-004B
; CURRENT APPLICATION NUMBER: US/10/068,215
; CURRENT FILING DATE: 2002-02-06
; PRIOR APPLICATION NUMBER: 09/645,069
; PRIOR FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: 60/150,390
; PRIOR FILING DATE: 1999-8-23
; PRIOR APPLICATION NUMBER: 60/164,897
; PRIOR FILING DATE: 1999-11-10
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.0
; ID NO 4
; LENGTH: 290
; TYPE: PR
; ORGANISM: Homo sapiens
=US-10-068-215-4

Query Match          100.0%; Score 1096; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VEGSNMTIECKFPVEKQDLALAIYWEKDNIIQFVHGEEDLKVQSSYRORARLTK 60
    |||||||
DB 30 VEGSNMTIECKFPVEKQDLALAIYWEKDNIIQFVHGEEDLKVQSSYRORARLTK 89
    |||||||

OY 61 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 120
    |||||||
DB 90 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 149
    |||||||

OY 121 EHELTQCAEGYKRAEVIWTSDDHQLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
    |||||||
DB 150 EHELTQCAEGYKRAEVIWTSDDHQLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
    |||||||

OY 181 TFRRLDPEENHTALVYIPELPLAHPNERT 210
    |||||||
DB 210 TFRRLDPEENHTALVYIPELPLAHPNERT 239
    |||||||

RESULT 3
US-09-896-738-12
; Sequence 12, Application US/09896738
; Patent No. US20020165347A1
; GENERAL INFORMATION:
; APPLICANT: Fox, Michael
; APPLICANT: Sullivan, John K.
; APPLICANT: Fang, Mei
; TITLE OF INVENTION: B7-Like Molecules and Uses Thereof
; FILE REFERENCE: 00-513-A
; CURRENT APPLICATION NUMBER: US/09/896,738
; CURRENT FILING DATE: 2001-06-29
; PRIOR APPLICATION NUMBER: 60/215,645
; PRIOR FILING DATE: 2000-06-30
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 290
; TYPE: PR
; ORGANISM: Homo sapiens
US-09-896-738-12

Query Match          100.0%; Score 1096; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VEGSNMTIECKFPVEKQDLALAIYWEKDNIIQFVHGEEDLKVQSSYRORARLTK 60
    |||||||
DB 30 VEGSNMTIECKFPVEKQDLALAIYWEKDNIIQFVHGEEDLKVQSSYRORARLTK 89
    |||||||

OY 61 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 120
    |||||||
DB 90 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 149
    |||||||

OY 121 EHELTQCAEGYKRAEVIWTSDDHQLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
    |||||||
DB 150 EHELTQCAEGYKRAEVIWTSDDHQLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
    |||||||

OY 181 TFRRLDPEENHTALVYIPELPLAHPNERT 210
    |||||||
DB 210 TFRRLDPEENHTALVYIPELPLAHPNERT 239
    |||||||

RESULT 4
US-09-896-913A-12
; Sequence 12, Application US/09896913A
; Patent No. US20020164600A1
; GENERAL INFORMATION:
; APPLICANT: Freeman, Gordon
; APPLICANT: Chernova, Irene
; APPLICANT: Chernova, Tatyana
; APPLICANT: Malenkovich, Nelly
; APPLICANT: Wood, Clive
; TITLE OF INVENTION: PD-1 MOLECULES: NOVEL PD-1 LIGANDS AND
; FILE REFERENCE: GNN-026A
; CURRENT APPLICATION NUMBER: US/09/896,913A
; CURRENT FILING DATE: 2002-04-15
; PRIOR APPLICATION NUMBER: 60/214,563
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: 60/270,822
; PRIOR FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 60/271,114
; PRIOR FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 290
; TYPE: PR
; ORGANISM: Homo sapiens
US-09-896-913A-12

Query Match          100.0%; Score 1096; DB 9; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VEGSNMTIECKFPVEKQDLALAIYWEKDNIIQFVHGEEDLKVQSSYRORARLTK 60
    |||||||
DB 30 VEGSNMTIECKFPVEKQDLALAIYWEKDNIIQFVHGEEDLKVQSSYRORARLTK 89
    |||||||

OY 61 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 120
    |||||||
DB 90 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 149
    |||||||

OY 121 EHELTQCAEGYKRAEVIWTSDDHQLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
    |||||||
DB 150 EHELTQCAEGYKRAEVIWTSDDHQLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
    |||||||

OY 181 TFRRLDPEENHTALVYIPELPLAHPNERT 210
    |||||||
DB 210 TFRRLDPEENHTALVYIPELPLAHPNERT 239
    |||||||

RESULT 5
US-09-915-789A-17
; Sequence 17, Application US/09915789A
; Patent No. US20020168762A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Lieping
; TITLE OF INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY
```

```
|||||
DB 30 VEGSNMTIECKFPVEKQDLALAIYWEKDNIIQFVHGEEDLKVQSSYRORARLTK 89
    |||||||

OY 61 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 120
    |||||||
DB 90 DQSLGNALQITDVKLQDAGYRCMISYGADYKRTTVNAPYKNINRILVDPVTS 149
    |||||||

OY 121 EHELTQCAEGYKRAEVIWTSDDHQLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180
    |||||||
DB 150 EHELTQCAEGYKRAEVIWTSDDHQLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209
    |||||||

OY 181 TFRRLDPEENHTALVYIPELPLAHPNERT 210
    |||||||
DB 210 TFRRLDPEENHTALVYIPELPLAHPNERT 239
    |||||||

RESULT 5
US-09-915-789A-17
; Sequence 17, Application US/09915789A
; Patent No. US20020168762A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Lieping
; TITLE OF INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY
```



;; TITLE OF INVENTION: MOLECULES  
;; FILE REFERENCE: 07039-219001  
;; CURRENT APPLICATION NUMBER: US/09/915,789A  
;; CURRENT FILING DATE: 2002-06-04  
;; PRIOR APPLICATION NUMBER: US 60/220,991  
;; PRIOR FILING DATE: 2000-07-27  
;; NUMBER OF SEQ ID NOS: 23  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 17  
;; LENGTH: 290  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-09-915-789A-17

Query Match 100.0%; Score 1096; DB 9; Length 290;  
Best Local Similarity 100.0%; Pred. No. 3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 VEGSNMTIECKPVEKQDLALIVYEMEDKNIIOFVHGEEDLKVOHSSYRORARLLK 60  
30 VEGSNMTIECKPVEKQDLALIVYEMEDKNIIOFVHGEEDLKVOHSSYRORARLLK 89  
QY 61 DQSLGNALQITDVVKIQDAGVYRCMISYGADYKRTIVKVNAPYKINORILVDPVTS 120  
90 DQSLGNALQITDVVKIQDAGVYRCMISYGADYKRTIVKVNAPYKINORILVDPVTS 149  
Db 121 EHETLCAEGYKPAEYVMTSSDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180  
150 EHETLCAEGYKPAEYVMTSSDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209  
QY 181 TFRRLDPEENHTAELVPELPLAHPNERT 210  
Db 210 TFRRLDPEENHTAELVPELPLAHPNERT 239

RESULT 6  
US-09-796-858-42

;; Sequence 42, Application US/09796858  
;; Patent No. US20020055139A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Holte mann, Douglas  
;; TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC,  
;; FILE REFERENCE: 7853-226-999  
;; CURRENT APPLICATION NUMBER: US/09/796,858  
;; CURRENT FILING DATE: 2001-03-01  
;; PRIOR APPLICATION NUMBER: 09/223,094  
;; PRIOR FILING DATE: 1998-12-30  
;; PRIOR APPLICATION NUMBER: 09/223,546  
;; PRIOR FILING DATE: 1998-12-30  
;; PRIOR APPLICATION NUMBER: 09/224,246  
;; PRIOR FILING DATE: 1998-12-30  
;; PRIOR APPLICATION NUMBER: 09/312,359  
;; PRIOR FILING DATE: 1999-05-14  
;; PRIOR APPLICATION NUMBER: 09/336,536  
;; PRIOR FILING DATE: 1999-06-18  
;; PRIOR APPLICATION NUMBER: 09/342,687  
;; PRIOR FILING DATE: 1999-06-29  
;; PRIOR APPLICATION NUMBER: 09/399,723  
;; PRIOR FILING DATE: 1999-09-20  
;; PRIOR APPLICATION NUMBER: 09/471,179  
;; PRIOR FILING DATE: 1999-12-23  
;; PRIOR APPLICATION NUMBER: 09/474,071  
;; PRIOR FILING DATE: 1999-12-29  
;; PRIOR APPLICATION NUMBER: 09/474,072  
;; PRIOR FILING DATE: 1999-12-29  
;; PRIOR APPLICATION NUMBER: 09/572,002  
;; PRIOR FILING DATE: 2000-05-14  
;; PRIOR APPLICATION NUMBER: 09/597,993  
;; PRIOR FILING DATE: 2000-06-12  
;; PRIOR APPLICATION NUMBER: 09/599,596  
;; PRIOR FILING DATE: 2000-06-22  
;; PRIOR APPLICATION NUMBER: 09/606,565

;; PRIOR FILING DATE: 2000-06-29  
;; PRIOR APPLICATION NUMBER: 09/365,164  
;; PRIOR FILING DATE: 1999-07-30  
;; PRIOR APPLICATION NUMBER: 09/630,334  
;; PRIOR FILING DATE: 2000-07-31  
;; PRIOR APPLICATION NUMBER: 09/665,666  
;; PRIOR FILING DATE: 2000-09-20  
;; NUMBER OF SEQ ID NOS: 50  
;; SEQ ID NO 42  
;; LENGTH: 290  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-09-796-858-42

Query Match 100.0%; Score 1096; DB 10; Length 290;  
Best Local Similarity 100.0%; Pred. No. 3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 VEGSNMTIECKPVEKQDLALIVYEMEDKNIIOFVHGEEDLKVOHSSYRORARLLK 60  
30 VEGSNMTIECKPVEKQDLALIVYEMEDKNIIOFVHGEEDLKVOHSSYRORARLLK 89  
QY 61 DQSLGNALQITDVVKIQDAGVYRCMISYGADYKRTIVKVNAPYKINORILVDPVTS 120  
90 DQSLGNALQITDVVKIQDAGVYRCMISYGADYKRTIVKVNAPYKINORILVDPVTS 149  
Db 121 EHETLCAEGYKPAEYVMTSSDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 180  
150 EHETLCAEGYKPAEYVMTSSDHOVLSGKTTTNSKREKLFNVTSLRINTTNEIFYC 209  
QY 181 TFRRLDPEENHTAELVPELPLAHPNERT 210  
Db 210 TFRRLDPEENHTAELVPELPLAHPNERT 239

RESULT 7  
US-09-875-338-2

;; Sequence 2, Application US/09875338  
;; Patent No. US20020095024A1  
;; GENERAL INFORMATION:  
;; APPLICANT: MIKESSELL, GLEN E.  
;; APPLICANT: CHANG, HAN  
;; APPLICANT: FINGER, JOSHUA N.  
;; APPLICANT: YANG, GUCHEN  
;; APPLICANT: LU, PIN  
;; APPLICANT: ZHOU, XIA-DI  
;; APPLICANT: PEACH, ROBERT  
;; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
;; FILE REFERENCE: 3053-4071US2  
;; CURRENT APPLICATION NUMBER: US/09/875,338  
;; CURRENT FILING DATE: 2001-06-06  
;; PRIOR APPLICATION NUMBER: 60/272,107  
;; PRIOR FILING DATE: 2001-02-28  
;; PRIOR APPLICATION NUMBER: 60/209,811  
;; PRIOR FILING DATE: 2000-06-06  
;; NUMBER OF SEQ ID NOS: 94  
;; SOFTWARE: PatentIn Ver. 2.1  
;; SEQ ID NO 2  
;; LENGTH: 290  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-09-875-338-2

Query Match 100.0%; Score 1096; DB 10; Length 290;  
Best Local Similarity 100.0%; Pred. No. 3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 VEGSNMTIECKPVEKQDLALIVYEMEDKNIIOFVHGEEDLKVOHSSYRORARLLK 60  
30 VEGSNMTIECKPVEKQDLALIVYEMEDKNIIOFVHGEEDLKVOHSSYRORARLLK 89  
Db 61 DQSLGNALQITDVVKIQDAGVYRCMISYGADYKRTIVKVNAPYKINORILVDPVTS 120

```
|||||
Db 90 DQSLGNAALQITDVKIQDAGVYRCMISYGGADYKRTIVKNAPYKINQRIILVDDPYTS 149
QY 121 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 209
QY 181 TFRRLDPEENHTALVPELPLAHPNERT 210
Db 210 TFRRLDPEENHTALVPELPLAHPNERT 239
```

## RESULT 8

```
US-09-910-174A-8
; Sequence 8, Application US/09910174A
; Patent No. US20020106730A1
; GENERAL INFORMATION:
; APPLICANT: Coyle, Anthony J.
; APPLICANT: Fraser, Christopher C.
; APPLICANT: Manning, Stephen
; TITLE OF INVENTION: B7-H2 Molecules, No. US20020106730A1 Members of the B7
; FILE REFERENCE: 35800/236924
; CURRENT APPLICATION NUMBER: US/09/910,174A
; PRIOR FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: US 09/620,461
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-910-174A-8
```

```
Query Match 100.0%; Score 1096; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 VEGSNMTIECKFPVEKQDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARILK 60
Db 30 VEGSNMTIECKFPVEKQDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARILK 89
QY 61 DQSLGNAALQITDVKIQDAGVYRCMISYGGADYKRTIVKNAPYKINQRIILVDDPYTS 120
Db 90 DQSLGNAALQITDVKIQDAGVYRCMISYGGADYKRTIVKNAPYKINQRIILVDDPYTS 149
QY 121 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 209
QY 181 TFRRLDPEENHTALVPELPLAHPNERT 210
Db 210 TFRRLDPEENHTALVPELPLAHPNERT 239
```

## RESULT 9

```
US-09-955-866-6
; Sequence 6, Application US/09955866
; Patent No. US20020107363A1
; GENERAL INFORMATION:
; APPLICANT: Fox, Michael
; APPLICANT: Sullivan, John K.
; APPLICANT: Holst, Paige
; APPLICANT: Yoshinaga, Steven Kiyoshi
; TITLE OF INVENTION: B7-Like Polypeptides and Uses Thereof
; FILE REFERENCE: 00/759-A
; CURRENT APPLICATION NUMBER: US/09/955,866
; PRIOR FILING DATE: 2001-09-19
; PRIOR APPLICATION NUMBER: 60/233,867
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: PatentIn Ver. 2.0
```

```
; SEQ ID NO 6
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-955-866-6
```

```
Query Match 100.0%; Score 1096; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 VEGSNMTIECKFPVEKQDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARILK 60
Db 30 VEGSNMTIECKFPVEKQDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARILK 89
QY 61 DQSLGNAALQITDVKIQDAGVYRCMISYGGADYKRTIVKNAPYKINQRIILVDDPYTS 120
Db 90 DQSLGNAALQITDVKIQDAGVYRCMISYGGADYKRTIVKNAPYKINQRIILVDDPYTS 149
QY 121 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 209
QY 181 TFRRLDPEENHTALVPELPLAHPNERT 210
Db 210 TFRRLDPEENHTALVPELPLAHPNERT 239
```

## RESULT 10

```
US-09-895-837-12
; Sequence 12, Application US/09895837
; Patent No. US20020110836A1
; GENERAL INFORMATION:
; APPLICANT: Freeman, Gordon
; APPLICANT: Chernova, Tatyana
; APPLICANT: Malenkovich, Nelly
; APPLICANT: Wood, Clive
; APPLICANT: Latchman, Yvette
; APPLICANT: Sharpe, Arlene H.
; TITLE OF INVENTION: PD-12 MOLECULES: NOVEL PD-1 LIGANDS AND
; FILE REFERENCE: GNN-026B
; CURRENT APPLICATION NUMBER: US/09/895,837
; PRIOR FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: 60/214,563
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: 60/270,822
; PRIOR FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 60/271,114
; PRIOR FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 290
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-895-837-12
```

```
Query Match 100.0%; Score 1096; DB 10; Length 290;
Best Local Similarity 100.0%; Pred. No. 3e-73;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 VEGSNMTIECKFPVEKQDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARILK 60
Db 30 VEGSNMTIECKFPVEKQDLALIVYWMEDKNIIQFVHGEEDLKVOHSSYRORARILK 89
QY 61 DQSLGNAALQITDVKIQDAGVYRCMISYGGADYKRTIVKNAPYKINQRIILVDDPYTS 120
Db 90 DQSLGNAALQITDVKIQDAGVYRCMISYGGADYKRTIVKNAPYKINQRIILVDDPYTS 149
QY 121 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 180
Db 150 EHELTCAEGYPKAEVIWTSDDHVLGSKTTTNSKREKLFNVTSLRINTTNEIFYC 209
```

OY 181 TFRRLDPENHTAELVPELPLAHPNERT 210  
DB 210 TFRRLDPENHTAELVPELPLAHPNERT 239

## RESULT 11

US-10-002-775-4  
Sequence 4, Application US/10002775  
Patent No. US20020102651A1  
GENERAL INFORMATION:  
APPLICANT: Gordon Freeman  
APPLICANT: Vassiliki Bousiotis  
APPLICANT: Tatyana Chernova  
APPLICANT: Nelly Malenkovich  
TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR  
FILE REFERENCE: GNN-004ADV  
CURRENT APPLICATION NUMBER: US/10/002,775  
CURRENT FILING DATE: 2001-11-02  
PRIOR APPLICATION NUMBER: US 09/644,934  
PRIOR FILING DATE: 2000-08-23  
PRIOR APPLICATION NUMBER: 60/150,390  
PRIOR FILING DATE: 1999-08-23  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 4  
LENGTH: 290  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-002-775-4

Query Match 100.0%; Score 1096; DB 12; Length 290;  
Best Local Similarity 100.0%; Pred. No. 3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 60  
DB 30 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 89  
OY 61 DQSLGNAALQITDVKLODAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 120  
DB 90 DQSLGNAALQITDVKLODAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 149  
OY 121 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSTLRINTTNEIFYC 180  
DB 150 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSTLRINTTNEIFYC 209  
OY 181 TFRRLDPENHTAELVPELPLAHPNERT 210  
DB 210 TFRRLDPENHTAELVPELPLAHPNERT 239

## RESULT 12

US-09-875-338-5  
Sequence 5, Application US/09875338  
Patent No. US20020095024A1  
GENERAL INFORMATION:  
APPLICANT: MIKESEIL, GLEN E.  
APPLICANT: CHANG, HAN  
APPLICANT: FINGER, JOSHUA N.  
APPLICANT: YANG, GUCHEN  
APPLICANT: LU, PIN  
APPLICANT: ZHOU, XIA-DI  
APPLICANT: PEACH, ROBERT  
TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
FILE REFERENCE: 3053-407IUS2  
CURRENT APPLICATION NUMBER: US/09/875,338  
CURRENT FILING DATE: 2001-06-06  
PRIOR APPLICATION NUMBER: 60/272,107  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: 60/209,811  
PRIOR FILING DATE: 2000-06-06

NUMBER OF SEQ ID NOS: 94  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 5  
LENGTH: 480  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-09-875-338-5

Query Match 100.0%; Score 1096; DB 10; Length 480;  
Best Local Similarity 100.0%; Pred. No. 5.3e-73;  
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 60  
DB 34 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 93  
OY 61 DQSLGNAALQITDVKLODAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 120  
DB 94 DQSLGNAALQITDVKLODAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 153  
OY 121 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSTLRINTTNEIFYC 180  
DB 154 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSTLRINTTNEIFYC 213  
OY 181 TFRRLDPENHTAELVPELPLAHPNERT 210  
DB 214 TFRRLDPENHTAELVPELPLAHPNERT 243

## RESULT 13

US-10-068-215-2  
Sequence 2, Application US/10068215  
Patent No. US20020160000A1  
GENERAL INFORMATION:  
APPLICANT: Clive Wood  
APPLICANT: Gordon Freeman  
TITLE OF INVENTION: PD-1, A Receptor For B7-4, and Uses Therefor  
FILE REFERENCE: GNN-004B  
CURRENT APPLICATION NUMBER: US/10/068,215  
CURRENT FILING DATE: 2002-02-06  
PRIOR APPLICATION NUMBER: 09/645,069  
PRIOR FILING DATE: 2000-08-23  
PRIOR FILING DATE: 1999-08-23  
PRIOR APPLICATION NUMBER: 60/150,390  
PRIOR FILING DATE: 2001-11-10  
NUMBER OF SEQ ID NOS: 23  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2  
LENGTH: 245  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-068-215-2

Query Match 93.9%; Score 1029; DB 9; Length 245;  
Best Local Similarity 100.0%; Pred. No. 1.9e-68;  
Matches 198; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 60  
DB 30 VEGSNMTTECKFPVEKQDLALIIYWEDEKNIIOFVHGEEDLVQHSYRORARLLK 89  
OY 61 DQSLGNAALQITDVKLODAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 120  
DB 90 DQSLGNAALQITDVKLODAGYRCMISYGADYKRTYVKNAPYKINORILVDPVTS 149  
OY 121 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSTLRINTTNEIFYC 180  
DB 150 EHELTCQAGYPRAEVIWTSDDHQLVSGKTTTNSKREKLFNVTSTLRINTTNEIFYC 209

QY 181 TFRRLDPEENTAEVLIP 198  
DB 210 TFRRLDPEENTAEVLIP 227

RESULT 14  
US-10-002-775-2

Sequence 2, Application US/10002775  
Patent No. US20020102651A1  
GENERAL INFORMATION:  
APPLICANT: Gordon Freeman  
APPLICANT: Vassiliki Boussiottis  
APPLICANT: Tatyana Chernova  
APPLICANT: Nelly Malenkovich  
TITLE OF INVENTION: NOVEL B7-4 MOLECULES AND USES THEREFOR  
FILE REFERENCE: GNN-004ADY  
CURRENT APPLICATION NUMBER: US/10/002,775  
PRIORITY FILING DATE: 2001-11-02  
PRIORITY FILING DATE: 2000-08-23  
PRIORITY FILING DATE: 2000-08-23  
PRIORITY FILING DATE: 1999-08-23  
PRIORITY FILING DATE: 1999-08-23  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2  
LENGTH: 245  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-002-775-2

Query Match 93.9%; Score 1029; DB 12; Length 245;  
Best Local Similarity 100.0%; Pred. No. 1.9e-68;  
Matches 198; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VEGSNMTIECKFPVEKQDLALIVYEMEDKNITQFVHGEEEDLKVOHSSYRQARLTK 60  
DB 30 VEGSNMTIECKFPVEKQDLALIVYEMEDKNITQFVHGEEEDLKVOHSSYRQARLTK 89  
QY 61 DQSLGNALQITDVKLODAGYRCMISYGADYKRITVKVNAIPYKINORILVVDPTS 120  
DB 90 DQSLGNALQITDVKLODAGYRCMISYGADYKRITVKVNAIPYKINORILVVDPTS 149  
QY 121 EHELTCOAEQYKAEVITWSSDHOVLGKTTTNSKREKLEFNTSTLRINTTNEIFYC 180  
DB 150 EHELTCOAEQYKAEVITWSSDHOVLGKTTTNSKREKLEFNTSTLRINTTNEIFYC 209  
QY 181 TFRRLDPEENTAEVLIP 198  
DB 210 TFRRLDPEENTAEVLIP 227

RESULT 15  
US-10-068-215-23

Sequence 23, Application US/10068215  
Patent No. US20020160000A1  
GENERAL INFORMATION:  
APPLICANT: Clive Wood  
APPLICANT: Gordon Freeman  
TITLE OF INVENTION: PD-1, A Receptor For B7-4, and Uses Therefor  
FILE REFERENCE: GNN-004B  
CURRENT APPLICATION NUMBER: US/10/068,215  
PRIORITY FILING DATE: 2002-02-06  
PRIORITY FILING DATE: 2000-08-23  
PRIORITY FILING DATE: 2000-08-23  
PRIORITY FILING DATE: 1999-08-23  
PRIORITY FILING DATE: 1999-08-23  
PRIORITY FILING DATE: 1999-11-10  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 23  
LENGTH: 290  
TYPE: PRT

ORGANISM: Mus musculus  
US-10-068-215-23

Query Match 74.4%; Score 815.5; DB 9; Length 290;  
Best Local Similarity 72.9%; Pred. No. 8.4e-53;  
Matches 153; Conservative 23; Mismatches 33; Indels 1; Gaps 1;

QY 1 VEGSNMTIECKFPVEKQDLALIVYEMEDKNITQFVHGEEEDLKVOHSSYRQARLTK 60  
DB 30 VEGSNMTIECKFPVEKQDLALIVYEMEDKNITQFVHGEEEDLKVOHSSYRQARLTK 89  
QY 61 DQSLGNALQITDVKLODAGYRCMISYGADYKRITVKVNAIPYKINORILVVDPTS 120  
DB 90 DQSLGNALQITDVKLODAGYRCMISYGADYKRITVKVNAIPYKINORILVVDPTS 148  
QY 121 EHELTCOAEQYKAEVITWSSDHOVLGKTTTNSKREKLEFNTSTLRINTTNEIFYC 180  
DB 149 EHELTCOAEQYKAEVITWSSDHOVLGKTTTNSKREKLEFNTSTLRINTTNEIFYC 208  
QY 181 TFRRLDPEENTAEVLIP 198  
DB 209 TFRRLDPEENTAEVLIP 238

Search completed: January 12, 2003, 10:19:08  
Job time : 9.47134 secs